

M E D I C A L COMMENTARIES.

EXHIBITING

A concise VIEW of the latest and most important DISCOVERIES in MEDICINE
and MEDICAL PHILOSOPHY.

COLLECTED AND PUBLISHED

BY

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*Neglecta reducit, sparsa colligit, utilia selegit, necessaria
ostendit, sic utile.*

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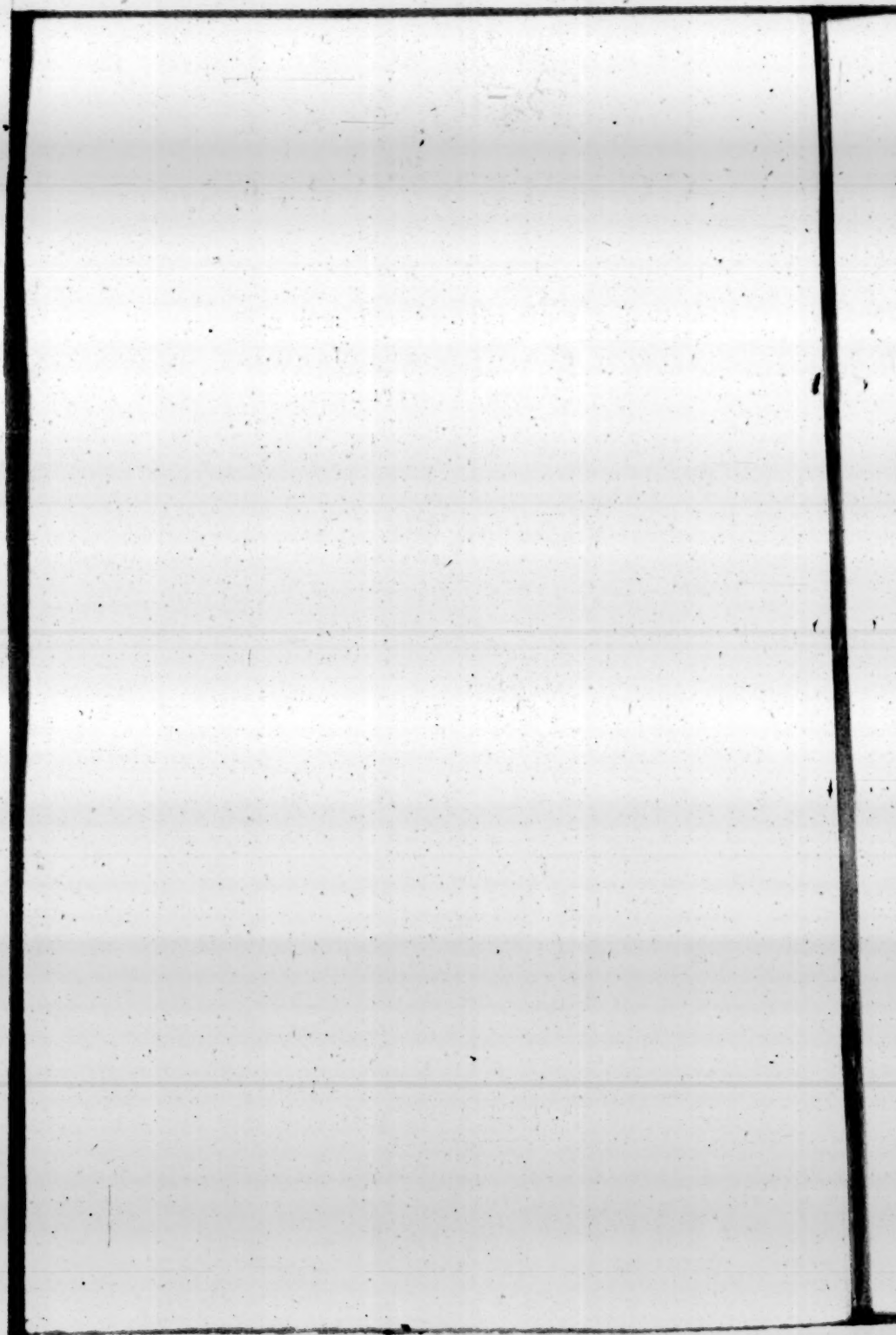
P A R T II.

For the Year 1780.

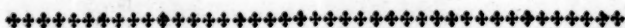
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M E D I C A L C O M M E N T A R I E S.



S E C T. I.

An Account of New Books.



I.

Henrich Matthias Marcard der Arzneywissen-
schaft, Doctors zu Hannover, Medicinische
Versuche. 8vo. Leipfig.

i. e.

*Medical Essays, by Henry Matthias Marcard, Phy-
sician at Hanover.*

IN the Essays now before us, Dr Marcard pre-
sents his readers with observations on different
practical subjects. His remarks are principally the

result of his own experience, during practice for several years. The first volume, of which alone we propose at present to give an analysis, is entirely on the subject of Jaundice.

In treating of Jaundice, he presents us with a doctrine concerning the disease in a good measure peculiar to himself. But, before delivering his own opinion, he sets out with some remarks on those which had already been offered by others. With regard to the nature of the distemper, he observes, that although ancients, as well as moderns, have very generally agreed that a preternatural yellow colour of the countenance, and particularly in the white of the eye, was an effect of the bile; yet they have differed as to the means by which this effect is produced.

He first takes notice of the opinion of Pechlin, who considers it as very improbable that the bile, which had once discharged itself out of the liver, should return back again by the same way, and from thence enter into the blood; and thus produce the disease.

Pechlin thinks it much more probable, that the materials of the bile exist in such a manner in the blood, that an accidental fermentation

tation may separate bile without any action of the liver, and give rise to the Jaundice by the parts thus separated being thrown upon the skin. This fermentation in the blood, he says, may take its rise from anger, melancholy, or the bite of a poisonous animal. And he thinks, that this accounts for the sudden existence of the Jaundice, in consequence of any violent affection of the mind, much better than the received opinion, that the bile finds its way back again into the liver, and by its action enters into the blood.

The opinion of Galen, he observes, very much resembles that of Pechlin. He imagines likewise, that the gall is circulated in a state of perfect mixture with the blood, and that without any intervention of the liver, merely by external causes, such as the bite of a poisonous animal, it may be separated from the blood. But, besides this, he is likewise of opinion, that the Jaundice may arise from the weakness of the gall-bladder, unable to draw to it the bilious matter from the blood.

Amongst the moderns, Van Swieten and Morgagni do not altogether discard this doctrine. They advance, that although it be true every

Jaundice does not exist in this manner, yet they are to be found in the blood particles destined for bile, which, without any action of the liver, can separate themselves from their mixture and occasion a Jaundice.

Mead says, that there is a species of the Jaundice which arises from a spasm of the nerves, when the fine elastic fluid, which is contained in them, becomes too acrid and strong, so as to shut the bilious duct, and prevent the gall from passing through the liver. It then, he thinks, finds its way upwards through the blood, and extends itself through every part of the body. He adds, that this is the case with the Jaundice which arises after cholic pains and the bite of a poisonous animal. From this our Author observes, it appears evident that Mead was of opinion, an obstructed separation of the gall was one of the causes of the Jaundice.

Dr Bruning, an author of great judgment and learning, in treating of the Jaundice which arises from spasm, offers an opinion which approaches something near to the former. He thinks, that when some disorder of the liver prevents it from performing the secretion of the bile, the oily and saline particles, which constitute the principal

pal part of the bile, remain behind in the blood. By this, the natural and healthy mixture of the blood is changed, and a yellow-coloured *cachymia*, and even the Jaundice itself, is occasioned. Dr Bruning, however, does not consider this as the sole cause of the Jaundice. He supposes it to take place only in certain cases, while in others the disease actually arises from the bile already secreted by the liver, which finds its way back again into the blood. And it is likewise the opinion of most of the other writers, who have adopted this doctrine with respect to the origin of the Jaundice, that every Jaundice does not arise in this manner. They always suppose, that the bile already secreted may return again into the blood, and by this means occasion it.

In the second Chapter, our Author proceeds to the examination of the foregoing theories. He observes, that the opinion of Pechlin, and those other writers who suppose that the bilious particles abandon the circulating fluid and attach themselves to the skin, in one point of view, has something in its favour; as it may easily be conjectured, that an obstructed secretion of the bile from the blood may occasion an

unnatural mixture. Still this, however, is mere conjecture. It often happens, that although a tedious obstruction in the liver may have existed, and consequently, a tedious secretion of the bile, and given rise to a sensibly yellow colour, yet it has by no means occasioned a Jaundice. Such a colour of the skin is sometimes to be found, where not the liver, but the lungs, are affected. Dr Simpson also has very well remarked in his Treatise on the Jaundice in the Edinburgh Medical Essays, that every yellow colour of the skin is not to be considered as a true Jaundice; and that unless the white of the eye be yellow, and the urine considerably coloured, we cannot assert that the bile has any share in this yellow appearance.

In order to show that a Jaundice cannot immediately arise from the blood, and the other circulating fluids, without the intervention of the *liver*, our Author applies to the preparation of the bile the chemical terms of *product* and *educt*. Of these terms, he gives the following explanation: "That a *product* is what by a certain process may be extracted from another substance, but could not formerly be found in the whole mixture, nor distinguished by any of its effects

effects and qualities. An *educt* again, is what could formerly be found in a body in its state of mixture; and before it be extracted, possesses the same qualities it afterwards has."—Now, there is no doubt that the blood contains the materials of the bile. The only question is, How these materials are contained in it? If the bile does already exist in the whole mixture, and be perceptible to the senses in the blood, or, in other words, be only an *educt*, there is a foundation for the foregoing theory. But if, on the contrary, we can discover nothing in healthy blood which has any resemblance to bile, and if it be a product from the blood, then this theory has no manner of foundation.

Our Author hesitates not to assert that the bile is no *educt* from the blood. We neither observe in blood the very remarkable colour of the bile, nor taste the bitterness; and we have no ground to suppose that it is any other way separated from the blood, than by some hidden operation of the liver. It therefore falls naturally under the idea of a product; as it was in no shape formerly to be perceived in the blood till it passed through the liver. From the application of this principle, it is in the highest degree

gree probable, that there is no production of the bile but by means of the liver ; and that the theory of Pechlin with regard to the origin of the Jaundice is altogether a chimera.

But a still more important objection to this theory he offers from the analogy of the other secretions. The secretion he considers in order to illustrate this, as being particularly analogous to it, is the semen ; and concludes, that as the tears are not separated by the pores of the skin, nor wax of the ear by the nose, so it is equally unnatural to suppose, that the bile is secreted without the action of the liver.

As a further objection to this doctrine, in the fifth Chapter, our Author adduces several instances of persons affected with swollen and schirrous livers, where an obstruction must necessarily have taken place, but without any appearance of the Jaundice.

After shortly mentioning the opinion of Sylvius, who supposes that the Jaundice arises from a disorder in the blood, which prevents the bile from intimately mixing with it, and that when the fluids are thus separated, the bile attaches itself to the skin ; a supposition which he considers as altogether arbitrary ; he next proceeds
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in the sixth Chapter, to consider the modern and generally received theory with regard to the origin of the Jaundice. It is now the common opinion, that no Jaundice can arise but by means of bile actually separated by the liver; and that the bile thus prepared, is thrown back into the blood by some preternatural circumstance. This circumstance is a stoppage of the bilious duct, which has been ascribed to various causes. Amongst the supporters of this theory, some pathologists, and Haller in particular, suppose that the shutting of the hepatic duct alone may occasion the Jaundice, and excludes the gall-bladder from having any manner of influence.

Our Author examines this opinion at very great length; and, in order to prepare the way for this examination, he considers the nature of the bile when contained in the liver, and when it is in the gall-bladder. When it is already separated by the liver, and in the bilious duct, its colour is very pale, and its bitterness but very inconsiderable. This he proves from several observations, and concludes, that the liver bile is sensibly different from the bile in the gall-bladder, which is of a darker colour and very bitter taste. He thinks that this difference may either
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be occasioned, according to an opinion of Haller, from the long continuance of the bile in the gall-bladder, and by that means a further separation from its watry parts ; or, that there may perhaps be a farther preparation and secretion of this fluid in the gall-bladder. While others have been of opinion, that the liver-gall may continue mixed with the blood, without producing any considerable effect ; our Author thinks he may with confidence assert, that the liver-gall although it be even separated from the blood, is by itself incapable, when again introduced into it, of giving any considerable Jaundice. He contends, that it is unable to give to the skin, eyes, and urine, a colour, and to the saliva a taste much stronger than it own.

After offering this objection to the generally received theory, he next applies to it the different causes which give rise to the Jaundice ; of which he supposes gall-stones to be the most frequent and important, insomuch that certain eminent writers are disposed to allow no other cause to be capable of producing it. With regard to biliary stones, our Author observes that they are for the most part found in the gall-bladder. Hoffman, he says, observes, that real
biliary

biliary stones in the liver are in the highest degree uncommon, which he ascribes to the thinness of the bile in the liver. It is true, other stony concretions are to be found in it, but these are not of a bilious nature, enter not into the biliary duct, and occasion not the Jaundice. After mentioning the observations of many anatomists on this subject, tending to confirm his opinion, he concludes, that if it appear that biliary stones chiefly occasion the Jaundice during the time they are in the gall-bladder or in the biliary duct; or if it be only certain, that in such circumstances Jaundice often arises, then the probability of the theory, that the bile finds its way back through the liver to the blood, is greatly weakened. But he observes it is a certain fact, that very generally the stoppage of the usual passage produces a Jaundice. The instances of this are so numerous and undeniable, that he judged it unnecessary to adduce them.

In like manner our Author endeavours to shew, from the inflammation of the liver, and other received causes of the Jaundice, the weakness of this theory; and in general insists upon the difficulty of the return of the bile through the liver into the blood, and the insufficiency
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of the bile from the liver to produce the Jaundice.

After having thus endeavoured to prove in the first part of his work, that from the most frequent and most important causes of the Jaundice, they cannot produce their effect in such a manner, that the bile from the gall-bladder can return back to the liver, and thence enter into the blood ; and likewise, that in every considerable Jaundice the bile in the gall-bladder has a share, our Author in the second division of this treatise, attempts to discover the way by which the bile from the gall-bladder may mix with the circulating fluids, without passing through the liver. In the first Chapter, from a variety of curious instances of morbid dissections, Dr Marcard proves, that the bile, in case of any stoppage of the duct, finds its way through the substance of the gall-bladder into the cavity of the abdomen, and then enters into the circulation. The bile, he says, is of a very penetrating nature, and the gall-bladder, like every membrane of that kind, is porous. In support of his opinion, he adduces a variety of facts from morbid dissections, where a considerable quantity of bile was found on the outside of the gall-bladder, which

which plainly appeared to have oozed through ; and in one instance, it was in so great quantities in the abdomen, that it could have been taken up in spoonfuls. Amongst others, he mentions a very curious instance from the English Philosophical Transactions, inserted by Dr Alexander Stuart, of a soldier wounded in the right side, who died in the 17th day, and was affected with a partial Jaundice. His urine, and some of the under parts of his body were yellow, as if stained with saffron. Upon dissection, he was found to have a small triangular wound in the bottom of the gall-bladder. From this instance he maintains it is evident, that the bile poured into the cavity of the abdomen enters into the circulation.

In the second Chapter, Dr Marcard proceeds to point out still another way by which the bile may intermix with the circulating fluids, without passing through the liver. He observes, that when the discharge of the urine is stopped by some obstruction in the urethra, it is an undeniable fact, that the urine already secreted finds its way back again into the blood ; and that in this case, no one is disposed to think that the urine rises up again through the long passage into the kidneys, and then enters into the blood.

With

With much better foundation they advance, that in the bladder, as well as in all the cavities of other animals, there exist certain absorbent vessels, which in a sound state, only take away a pure unmixed fluid; but when there is a total stoppage of the discharge, in consequence of the stimulus occasioned by the very great fullness, and by the acrimony of the quantity so long contained there, they now allow the urine to enter into the mixture, which by this means finds its way into the blood. Although one cannot absolutely conclude, from what in certain circumstances takes place in the bladder containing the urine, that in a similar situation the same thing shall take place in the gall-bladder; yet our Author thinks it in the highest degree probable. And the reason why this has not been attended to is, because another way seemed possible. For the gall-bladder has not only as many lymphatic vessels as the urinary bladder, but many more, and much more visible. He observes, that many greater and more remarkable changes must take place on the bile than with the urine, during its continuance in the bladder, as the urine is discharged almost always as it comes from the kidneys. The bile,
while

while it is a very mixed fluid, and of considerable consistence, is nevertheless of a very penetrating nature, as is obvious from its effects upon the parts in the neighbourhood of the gall-bladder; and is therefore very well adapted to penetrate through the vessels. And if this be its nature in a sound and healthy state, how much more may it act in this manner in a morbid condition. Our Author, therefore, sees no reason why he may not advance, that the many absorbents of the gall-bladder, which, in a natural state, only imbibe the superfluous fluids, when in a morbid condition may pass the bounds of their destination, and admit the bile in the entire mixture. The kidneys, he says, sometimes let the blood through. And when bile is thus received by the lymphatic vessels, it enters into the system of blood-vessels, and thus into the mass of circulating fluids.

The two ways, therefore, by which Dr Marcard asserts the bile enters into the blood, without passing through the liver, are the absorbent lymphatic vessels, and the inorganic openings or pores of the gall-bladder. He thinks, that this last way will only take place when the bladder is very much distended, either from its be-

ing very much filled with bile, or when it is not so much filled but pressed upon by some external force; or when the coats of the gall-bladder are affected by some particular torpor. In these cases, he says, it is no wonder that the transfusion of it should continue even after death, unless some particular cause shut the pores that were thus opened.

The causes which force the absorbent vessels to receive the bile, according to appearances, are more numerous; in this however they agree, that it is in consequence of some stimulus excited they produce this effect. Both these ways may exist at the same time, and then their effect is the more considerable; and even the very great distension of the gall-bladder, which enlarges the pores, may, in the end, have an effect upon the lymphatic vessels, and force them to attract the bile. He looks upon it, however, as certain, that the inordinate action of the absorbing vessels is by much the most frequent cause of the Jaundice, as it may take place when there is not a very great quantity of bile in the gall-bladder, and when the passage from the gall-bladder to the intestines is not in the smallest degree obstructed.

After

After having thus established his theory, and that liver-bile is insufficient to produce the Jaundice, which must be occasioned by bile already prepared in the gall-bladder: That the bile from the gall-bladder does not return back again into the liver, and thus enter into the blood, but either finds its way through the pores of the gall-bladder into the cavity of the abdomen, or is absorbed by the lymphatic vessels, Dr Marcard next proceeds to apply this doctrine to the various causes inducing the Jaundice.

The first which he considers is spasm; and after mentioning the various causes inducing spasm, he shows how it produces its effect. He points out the different influence of stones in the gall-bladder, that when they are free and detached they produce their effect by occasioning a stimulus, and inducing a spasm; but when in the neck of the gall-bladder, they stop up the passage and prevent the discharge.

When the Jaundice arises from the bite of a poisonous animal, he is not of opinion with Dr Simpson and some ancient authors, that it is occasioned by an internal commotion of the blood. But he thinks, with Dr Mead, that it arises from spasm. He does not, however, with Dr Mead,

ascribe it to a spasm which only affects the common canal, and thereby forces the bile back through the liver into the blood, but to a spasm which has this peculiarity in it, that it produces an effect upon the absorbent vessels of the gall-bladder. After mentioning a variety of other causes, which Dr Marcard thinks occasion a Jaundice by inducing spasm, he considers some causes which produce this effect without occasioning spasm. These are stoppages of the neck of the gall-bladder, which, though unfrequent, are nevertheless very certain causes of the Jaundice. And while stones stick fast in the biliary duct, they may produce their effect in this manner, but much more frequently by exciting a stimulus and inducing a spasm. Besides this, he mentions others, such as a defect in the absorbent vessels of the gall-bladder, the thickness of the gall, and the like. And he shews, that all the various causes operate in the ways he has pointed out, in producing the Jaundice.

To this Treatise upon the Theory of the Yellow Jaundice, he subjoins an Appendix, containing a short account of the Black Jaundice, and practical observations upon the treatment of the Yellow Jaundice.

Although

Although the Black Jaundice is sometimes nothing else but a dark yellow Jaundice; yet at other times, the colour is so very dark, and appears in such a manner that one must conclude it to have something peculiar in its nature, and not merely to be a higher degree of the Yellow Jaundice. This disease is well known to be much more frequently mortal than the Yellow Jaundice. The ancients imagined that it arose from the spleen: But from several instances which our Author adduces, he observes, that although the disease which is named Black Jaundice be manifold, still, however, he is disposed to think it is nothing else than a strong Yellow Jaundice. He contends, that the bile can assume all manner of colours, green, red, and in certain circumstances black. The worst kinds of Black Jaundice are, he says, those which arise from a very great consumption in the organical parts of the biliary system. When it only differs from the Yellow Jaundice, in the skin having a greenish appearance, or when any difference may arise merely from a preternatural colour of the bile, in the view of medical treatment, the Black Jaundice has nothing peculiar from the Yellow Jaundice. But when it arises from any

consumption of the important viscera, our Author suspects that in such cases art can very seldom apply any remedy; and hence the cause why the Black Jaundice is so often mortal.

In the cure of the Jaundice, our Author says, he has two objects in view, the one is to remedy the consequences of this disease, and the other to remove the causes of it.

On account of the obstructions which take place, cleansing medicines are often employed, and in general rhubarb is given: But where there is any reason to suspect spasm, or to hope that stones may be discharged, our Author thinks that manna is greatly preferable.

In order to correct the disorder which must arise in the state of digestion from the want of the bile, many means have been devised, but nothing appears to our Author equal to thickened ox-gall in pills.

To correct the heat and burning in the external parts, even when there is properly no fever, he recommends the use of acids.

He proposes a variety of medicines for the biliary stones, the most important cause of the Jaundice, both with the view of removing and of dissolving them.

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When a biliary stone occasions very great motions in the body, blood-letting is usually recommended; but opium he considers as by much the most important remedy for removing the violence of the symptoms which arise from the stimulus of a stone. For in consequence of this, it is often, he observes, necessary to diminish the intolerable pain, to remove the spasm, to quiet the continual vomiting, and to support the strength, and sometimes even the life of the patient. A variety of other medicines of a diluting nature are likewise recommended by our Author, with the view of fulfilling the same intention, as almond-oil, spermaceti, &c. He advises also, external fomentation of the place where the disorder has its seat, baths of tepid water over the whole body, and emolient clysters.

The greater probability there is that the stone may be discharged, the more foundation there is to have recourse to violent purges and vomits. But in the use of vomits particular caution is necessary, and he thinks they are only to be employed when there is no reason to dread any inflammation, or to suspect any defect of the viscera. A great deal of motion, and a long journey, has likewise been recommended, with the

view of discharging the biliary stones. Our Author likewise gives his opinion about the efficacy of soap and some other medicines used for the biliary stones. He afterwards points out the medicines to be used when the Jaundice arises from spasm, where he says, particular attention must be paid to the causes inducing it. He concludes with examining the various specifics for this disease, in none of which he is disposed to place any confidence.

II.

Observations on Fevers, especially those of the continued type ; and on the Scarlet Fever, attended with ulcerated sore throat, as it appeared at Newcastle upon Tyne in the year 1778 : Together with a comparative view of that epidemic with the Scarlet Fever, as described by authors, and the Angina Maligna. By John Clark, M. D. one of the Physicians to the Newcastle Dispensary. 8vo. London.

DR CLARK is an author whose name we have already, oftner than once, had occasion to mention in these Commentaries. Besides

sides the analysis which we gave of his observations on diseases in long voyages to hot climates, our readers may also remember several original papers with which he has enriched this periodical publication. In the present work, he treats of a subject, which, although often before considered, must still be admitted to be important, and will, we doubt not, be viewed as affording a valuable article for the present number.

It would much exceed the limits of our publication, to give a complete analysis of the volume now before us; we shall therefore only endeavour to present our readers with a concise account of the opinions and practice of our Author; particularly of those which differ from the established doctrines.

Dr Clark has divided his work into two parts. In the first, he treats of fevers, especially those of the continued type. After introducing his subject, by giving a short definition of primary fevers, we are, in the second section, presented with observations on their difference. He remarks, that both the ancients and moderns have divided fevers into many *genera*, and have bestowed many appellations upon them, derived
from

from the time of their duration, from some remarkable predominant symptom, from the state of the fluids which accompany them, and from other circumstances. But he thinks, that the many names to be found in books, only load the memory, perplex the unexperienced, and are of no real advantage in practice. After careful attention to the symptoms and nature of fevers, in different climates, our Author is convinced, that although many varieties happen, according to the difference of constitution, season, situation and country, yet every where fever is essentially the same; or, in other words, consists of one *genus*, and that the only *species* that can be clearly ascertained are the following, *viz.* intermittent, remittent, and continued fevers. In support of this opinion, he recites the essential symptoms of these species; and concludes, that continued fevers do not differ more from the remittent, than the last from the intermittent type. Their frequent changes into each other, prove them to be of the same *genus*; and the variety of their forms, he thinks, depends in a great measure upon the difference of climate, constitution, &c. but more particularly on the concurrence of the remote causes of fever, *viz.* a moist

moist warm state of the air, marsh effluvia, and human contagion; the two former producing the intermittent or remittent, and the latter almost always the continued type.

Continued fevers have been commonly supposed, by medical authors, to consist of three *genera*, the *inflammatory*, the *nervous*, and the *putrid*. Dr Clark, however, rejects this division of fever, as he is of opinion, that these supposed *genera* only express different states of fever. The inflammatory fever, for example, is defined to consist in intense heat, frequent, strong, hard and full pulse, with high coloured urine. Most fevers, in their incipient state, he observes, are attended with these symptoms, which however prevail more in the paroxysms of intermittent and remittent fevers, than in those of the continued type. Even the depressing powers of contagion do not always guard against symptoms of strong action in the heart and arterial system. Gilchrist, describing the *nervous* fever, remarks, "That in some the seizure and symptoms on the first days were violent; such as vomiting, nausea, head-ache, full, strong, and hard pulse, heat and redness of the eyes." Except by the tremors of the hands, even the
jail

jail or hospital fever is not to be distinguished, in the beginning, from any common fever. Sir John Pringle in this fever, and Huxham in the putrid fever, advise bleeding to moderate the strong action of the vessels. For these reasons, our Author thinks, whatever attention this state of fever may merit in practice, as it equally attends intermittent, remittent, and continued fevers, it ought not to be admitted as constituting any generic difference.

The term *inflammatory*, indeed, in his opinion, ought only to be applied to fever when it is the concomitant of inflammation; and he adds, that, however contrary the assertion may be to the authority of physicians of the first eminence, he has never met with an idopathic inflammatory fever. He is inclined to believe, that the fizy appearance of the blood, which has led to the opinion of fevers being inflammatory, is no certain criterion of inflammation, as it has been frequently observed to exist in the blood of those who have laboured under putrid diseases; and in support of this fact, he quotes the authority of Drs Heberden, De Haen, and Sir John Pringle.

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Having, for these reasons; rejected the *inflammatory* fever, as an idopathic disease, he proceeds to the consideration of the other distinctions which have been applied to continued fevers. Every symptom characteristic of the *nervous* fever, he remarks, attends *remittents* of hot climates; and even all continued fevers in this country, are, in general, sooner or later succeeded by this state of fever. And with regard to the *putrid*, although in some fevers the fluids from the beginning have appeared in a dissolved state, yet putrescency is more frequently an effect of fever than a cause, and equally attends intermittent, remittent, and continued fevers. There appears, therefore, he thinks, great impropriety in confining these terms to continued fevers; and still more so, in establishing them as different *genera*.

In other diseases, Dr Clark farther observes, were we to form distinct *genera*, from different states of the fluids and other attending circumstances, as has been the case in continued fevers, we should very much multiply diseases, which are essentially the same. The small pox, for example, is almost always attended with fever, which, in some patients, is accompanied with

Strong

strong action in the vessels; in others, with symptoms of debility and *nervous distress*; and in others, with those which denote a tendency in the fluids to putrefaction. Nay even the same patient (which is also the case in continued fevers) will, in a few days, go through the different states of fever which attend this disease; yet every physician knows, that the distemper proceeds from the same specific contagion; and that these varieties express no generic difference. Upon the whole, he is of opinion, that all primary fevers are attended with the same essential symptoms; and that the only difference is, that in some of them the intermissions and remissions are perfect; and in others so obscure as justly to entitle them to the name of *continued*. He likewise allows, that they differ from each other, in being sometimes attended with strength and activity in the vascular system, sometimes with symptoms of debility, and sometimes with those which denote a tendency in the fluids to putrefaction. He thinks it therefore reasonable to conclude, that they do not arise from so complex an origin, nor require so great a variety in treatment as has been generally imagined.

Having

Having made these observations, our Author passes over the treatment of intermittent and remittent fevers in a cursory manner; as the use of the Peruvian bark in the former is universally established, and as he has already treated of the latter in another publication *. He then proceeds, in the third section, to treat of the cure of continued fevers.

Although he admits that great variety obtains in continued fevers, with respect to their symptoms and degree of danger, yet in practice he judges it principally necessary to attend to the following distinctions or states of fever:

1. Continued fevers frequently in the beginning are attended with strong action in the vascular system; and this state may be distinguished by the following symptoms: The pulse is quick, strong, hard, and full; the heat of the body intense; the urine high coloured, and often in small quantity; and the senses and spirits remain tolerably clear. If the fever continue, or if it be not prevented by the method of cure afterwards to be mentioned, it is for the most part sooner or later succeeded by the following state.

2. Continued fevers are more frequently, from the beginning, or soon after their formation,

* *Observations on the diseases of long voyages to hot countries, &c.*

tion, attended with debility and depression of the vital powers; and this state may be distinguished by the following symptoms: The pulse is weak, quick, and frequently unequal; the urine commonly pale; the heat not very intense; and the strength and spirits prostrated. Watchfulness and delirium are added, and, as the disease advances, the delirium terminates in *coma*. *Subsultus tendinum* ensues; the stools and urine frequently glide off involuntarily; and the patient is apt to faint on the least motion.

3. Both the preceding states of fever are frequently succeeded by, or attended with, a disposition in the fluids to putrefaction, which is distinguished by the following symptoms: The tongue becomes dry and black; the breath and stools foetid; *petechia*, purple or livid spots appear; hæmorrhages happen from the nose and various parts; and, before death, the body very frequently emits a cadaverous smell.

Having thus distinguished continued fevers, and having given the above characteristic symptoms, by which their most important states may be known, he proceeds to mention the method of cure which he found most beneficial.

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In the first state of fever, Dr Clark directs emetic tartar to be given in such doses as to vomit gently; and if the strong action of the vessels do not abate, we are told, that it will be proper to continue the antimonials for some days longer, in such a manner as to keep the secretions open. Should it fail to operate downwards, some mild laxative must be added. As soon as the velocity of the circulating fluids is by this means diminished, he commences immediately with the Peruvian bark, without regard to remissions or exacerbations, and continues it in as large doses as the patient's stomach will bear. And we are told, that if this method be in due time applied, the disease will seldom terminate in the other states of fever; or, in other words, become *nervous* or *putrid*. With regard to bleeding, in this state of fever, he allows that there may be some cases which may demand its use, particularly when there are evident signs of topical determinations of blood, to the head, lungs, or any other part; when the patient is plethoric and vigorous; and when the disease derives its origin from other causes than contagion. But we are told, that during several

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years practice he has only had occasion to direct this evacuation twice in continued fevers.

In the *second* state of continued fever, attended with debility and depression of the vital powers; when called in the beginning, if the skin be hot and dry, he gives antimonials as directed in the former state; but he never continues their use so long as to produce profuse evacuations. But when the patient has been much weakened, or the disease advanced, he thinks antimonials are unsafe, and ought to be omitted entirely. With respect to other medicines, he places the whole stress of the cure on the Peruvian bark, without waiting for remissions.

In the *last* state of fever, the bark ought to be given in very liberal doses, together with the vegetable or vitriolic acid; ripe fruits, wine, and other antiseptic liquors. The use of the bark, in this state of fever, being so agreeable to the established practice, our Author thinks there is not the least occasion to insist upon the advantage which may accrue from it.

If the above method of cure be employed in the different states of fevers, during the first week, we are told, that it will very frequently remove them. But after they are once confirmed,

firmed, all that can be expected from the bark is to obviate debility ; counteract putrefaction ; and to prevent fatal determinations to the viscera, which our Author esteems the principal causes of death in fevers. Besides the method of cure above recommended, he uses, as auxiliaries along with the bark, *pediluvia*, or fomentations to the legs and feet ; the free admission of cold air ; taking the patients out of bed ; light cloathing ; keeping the belly regular ; the use of opiates, and blisters in some cases ; and when symptoms of debility, or putrescency prevail, cold drinks with a sufficient proportion of generous wine.

In support of the practice recommended in the common states of continued fever, the Author has related twenty-eight cases very minutely, in which it was attended with remarkable success.

In the 4th Section, we are presented with the account of a variety of continued fever, which prevailed at *Newcastle* in the autumn of 1777. The disease began with shivering, listlessness, sickness at stomach, and universal pains. On the invasion, some complained of cough, stricture and oppression of the breast, attended with

flight stitches of the sides, and wheezing respiration. In a few days, the strength and spirits were prostrated, the tongue became dry and brown, and the teeth were covered with a thick fur. A delirium and stupor soon appeared; and these symptoms often remained for several days after the fever had vanished. About the eighth or tenth day of the disease, sometimes sooner and sometimes later, both red and white miliary eruptions appeared, which were frequently interspersed with *petechiæ*. In many, the countenance was bloated; the eyes dull and blood-shot; the throat covered with an *aphthous* crust; and the stools involuntary, bilious, and putrid. In this fever, antimonials given in the beginning, together with paregoric elixir to appease the cough; and afterwards, the bark in liberal doses, were attended with the happiest success. To illustrate the nature of this epidemic, twenty cases are subjoined.

This part of the Work is concluded with an account of the success of the Author's practice in fevers; and a detail of the cases which terminated fatally under his care at the *Newcastle Dispensary*: By which it appears, that *two hundred and three* patients were admitted, labouring
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under continued fevers ; of whom, *one hundred and ninety-six* were discharged perfectly cured ; *six* died, and *one* was dismissed for being irregular, whose case afterwards terminated fatally.

The *second* Part of the Work contains observations on the Scarlet Fever, attended with ulcerated fore throat. The Author introduces his account, with some remarks on the state of the air previous to, and during the prevalence of this epidemic. The disease, we are told, made its appearance at *Newcastle* in the beginning of June 1778, and soon after extended itself to many towns and villages in the neighbourhood ; both in the counties of *Durham* and *Northumberland*. It was most frequent in August, September, and October ; was upon the decline after December ; but a few instances of the disease occurred still till August 1779.

The disease, we are informed, was peculiar to children and young persons ; although several adults exposed to the contagion did not escape. The distemper was not prevalent in genteel families, but raged with great mortality amongst the lower class of people. The small pox was also frequent at the same time, and some cases of the inflammatory fore throat, and erysipelas

occurred. The measles appeared in January 1779, and succeeded this disease as an epidemic.

From a table which the Author has annexed, it appears, that children of all ages under ten years, were most liable to the disease; that under twenty years of age, the number of males and females was almost equal; but that above this period, the number of females greatly exceeded that of males; a circumstance which he accounts for, from the former being more exposed to contagion, from being employed in attending the sick.

Having made these introductory observations, Dr Clark, in the first section, proceeds to the description of the disease. No epidemic, we are informed, varied more in different patients exposed to the same contagion, than the Scarlet Fever attended with ulcerated sore throat. In some, it was so mild as to require little aid from medicine; whilst in others it was so malignant as to yield to no plan of treatment. The disease, in general, began with sickness, lassitude, and chillness or shivering. The patient soon complained of headach, and pain of the throat. The skin became hot, the pulse very quick, often full and firm; but sometimes it was small and feeble, though

though generally hard. At night the fever ran high; and the patients were restless and often delirious.

Soon after the attack, the tonsils, *velum pendulum palati*, and *uvula*, appeared inflamed. The swelling and redness in these parts increased, and white sloughs or ulcerations were soon discovered. Deglutition became painful, and often exceedingly difficult; and respiration quick, and frequently laborious. The breath was hot, though not offensive; the tongue was soon covered with a white fur; the mouth and *fauces* were loaded with viscid mucus, and this, together with the tumefaction of the throat, occasioned, even early in the disease, rattling breathing. Such was the usual progress of the disease during the first three days; but, in many cases, these symptoms were ushered in with vomiting, purging and delirium.

When the disease began with great severity, the scarlet efflorescence was often observed on the first day; but, in general, it did not make its appearance until the second or third day, and sometimes not until the fourth. The eruption consisted of innumerable little pimples running together, and tinging the skin of a dull red colour.

lour. The redness was first perceivable on the face, neck, and breast; and was often universally diffused over the body, which appeared, in some degree, tumefied. In others, the eruption was scattered here and there in blotches; but the thighs, legs, and arms were, in general, covered with it; and the hands and fingers were often œdematous, and painful when pressed.

The duration of the efflorescence was uncertain; it however, in general, turned brown in three or four days; the skin became rough, and peeled off in brawny scales, and very frequently in large, thick, jagged pieces. In one patient, the desquamation was so complete, that the nails cast off; and in many, we are told, that the cuticle kept peeling off after the 30th day of the disease.

When the disease was malignant, after the appearance of the eruption, the sloughs encreased; the maxillary and parotid glands swelled; the eyes became dull and heavy; the face and neck often bloated and œdematous; and the patient either laboured under inquietude, delirium, or coma. In milder cases, after the desquamation of the cuticle, the fever subsided, the ulcerations healed, and the patients were speedily

speedily restored to health. Several, however, fell into anasarcaous swellings, and either true *hydrops pectoris*, or dropsy of the cellular substance of the lungs. Others, after shewing signs of recovery, kept drooping, and, though free from fever in the day, passed hot and restless nights; the countenance became pale, the face puffy, and the maxillary and lymphatic glands of the neck continued swollen. Pale thin matter ran from the nose and ears, and at last suppurations were formed in the *Eustachian* tube, which destroyed the *tympanum*; and some patients lost the *auditory* bones.

When the sick applied late for assistance, the inflammation communicated to the *trachæa* and lungs occasioning hoarseness, incessant cough, wheezing and rattling respiration. A child, we are told, was admitted to the Dispensary in this situation, even so late as the 14th day of the disease; and our Author saw several other miserable objects, who had survived to as late a period, with ulcerations, which had perforated the *velum pendulum*; and excoriations of the mouth, lips, and parts near the *anus*.

From the above description, Dr Clark observes, that the Scarlet Fever and sore throat has

a great analogy to the *angina maligna*; he thinks indeed, they proceed from the same specific contagion; and in confirmation of this opinion, he gives us an account of the different states of the Scarlet Fever, during its prevalence at Newcastle. Of *thirty-six* patients, whom he attended in private practice, *twenty-six* had the Scarlet Fever, accompanied with mild ulcerations of the throat; in *one* it was succeeded by dropsy; and *nine* had the disease attended with every distinguishing symptom of the *angina maligna*; yet in all these cases the sources of contagion were apparently the same. Of *ninety-five* patients, who came under our Author's care at the Dispensary; *forty-nine* had the Scarlet Fever with a mild ulcerated sore throat; in *twenty-two* the disease was succeeded by dropsy; and in *twenty-four* it was accompanied with *angina maligna*.

But, in most patients, Dr Clark admits that the epidemic differed from former accounts of the *angina maligna*, or putrid sore throat, in the following particulars. In the beginning it was accompanied with stronger action of the vessels; and the ulcerations were of a milder nature. The patient seldom in the beginning complain-
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ed of debility or faintness ; the efflorescence was commonly more plentiful, and the desquamation of the cuticle more complete. In the *Angina maligna*, as described by authors, the patients most commonly die on the third or fourth day of the disease ; whereas in the Scarlet Fever, in the cases which proved fatal, most of the patients protracted their miserable existence to the 13th, 15th, 16th, 17th, and sometimes even to the 19th day of the disease ; but above all the scarlet fever frequently terminated in dropsy, a disease which no author mentions as being the consequence of the *angina maligna*.

The Author next enters upon the investigation of the cause of the disease, of which we cannot pretend to give a detail.

In the second Section, Dr Clark presents us with a comparative view of the above epidemic, with the Scarlet Fever of authors, and the *angina maligna*, together with the various methods of cure which they have recommended. From this review which he has taken of the Scarlet Fever, as it has been observed in different parts of Europe, and of the *angina maligna*, he is farther convinced, that they ought not to be considered as distinct affections, but only as different *species*
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of the same disease. The *scarlet efflorescence* is a leading symptom, and in both diseases there is a determination of the morbid matter to the throat.

Our Author, indeed, is sensible that plausible objections may be made to this opinion; and that it may require the united efforts of the faculty and future experience to ascertain its truth. It may be urged that the *angina maligna* requires a very different treatment from several species of the Scarlet Fever; this circumstance, however, he thinks, is not sufficient to constitute a generic difference, for the same thing happens in the varieties of the small pox, which is well known to arise from specific contagion. It may be objected that the Scarlet Fever only seizes patients once in their lives, whereas having the *angina maligna* once is no security against a second attack: This he allows to have some weight; though he very much doubts whether the *angina maligna* was ever attended with the scarlet efflorescence twice in the same patient; yet it is probable, that when the disease is epidemic, the same patient may have the affection of the throat repeatedly. But without considering the subject in this extended point of view,
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he is certain that the practice can never be properly guarded, and mistakes must constantly arise in treating diseases, in so many respects different.

In the third Section, our Author proceeds to the cure. Although the disease was not new to him, having once before seen the Scarlet Fever and sore throat epidemical, yet from the combination of the *inflammatory* and *putrid* symptoms, he confesses, that, in several instances, in the beginning of the epidemic, he was at a loss how to proceed. The great resemblance of the disease to the *angina maligna*, and the subjects being chiefly the young and the delicate, prevented all thoughts of bleeding. When called early, therefore, while the action of the vessels continued strong, after directing the patient's legs and feet to be bathed in warm water, he gave emetic tartar, in such doses, as to vomit; and afterwards to keep the belly open; directing detergent gargles to be injected into the *fauces* milk warm. By these means a great deal of bile was frequently voided; the fever abated; the throat rendered easier; and the disease was either removed at once, or yielded to such preparations

parations of the bark, as the patients could be prevailed upon to take.

But whatever signs of inflammation might appear in the beginning, the disease, when malignant, soon assumed a putrid form. When called in this state of the disease, when it approached to the nature of the *angina maligna*, which was known from the appearance of the sloughs, the bloated countenance, the feeble pulse, and the swelling of the parotid glands, together with the tumefaction of the neck, our Author was deterred from giving *emetic tartar*, and therefore placed his chief confidence in the Peruvian bark, antiseptic gargles, and a cordial regimen. In such a state of the disease, this method was commonly attended with success, when applied in time. But, in some instances, we are told, that from the combination of *putrid* and *inflammatory* symptoms, this powerful medicine was found ineffectual; and those invariably recovered best, whose cases would admit of antimonials in the beginning.

In the dropical state of the disease, our Author directs purgatives and diuretics, with the use of the bark during intervals. The purgative, from which he found most advantage, was calomel

mel variously combined with squills. When this state of the disease was accompanied with fever, which, we are told, was frequently the case, he first gave emetic tartar in nauseating doses, and afterwards an infusion of the bark, made with boiling water, joined with *sal diureticus*, or *acetum scilliticum*. When the patients laboured under rattling breathing, and peripneumonic symptoms; besides these remedies, blisters were applied to the sides, and betwixt the shoulders. These methods, we are informed, were always attended with success, unless the patient laboured under a dropfy of the cellular substance of the lungs.

In the fourth Section, Dr Clark illustrates the nature of this singular epidemic, and the method of cure, by the relation of particular histories. We are here presented with eleven cases in which the Scarlet Fever was attended with mild ulcerations of the throat; twelve cases in which it was attended with gangrenous ulcers of the throat; and lastly, six cases of the dropfical swellings consequent on the disease.

In the fifth Section, we are presented with an account of the success of the practice, which our Author has recommended in the Scarlet Fever;
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and with a relation of the unsuccessful cases, with a view farther to explain the malignant nature of the epidemic; and to afford the medical reader an opportunity of judging of the advantages of the plan of treatment. From this account it appears, that of *thirty-six* patients whom the Author attended in private practice, *thirty-two* were restored to health, and *four* died: And of *ninety-five* who came under his care at the Dispensary, *eighty-one* returned thanks for their cure, *one* was discharged for irregularity, and in *thirteen* the disease terminated fatally.

Our Author concludes this part of the Work with the following inferences, which we shall transcribe, as they appear to us to have derived their origin from careful observation.

1. "The Scarlet Fever is a contagious disease, and almost always attended with a sore throat, which is sometimes erysipelatous, sometimes ulcerated, and sometimes of a putrid and gangrenous nature. On the 1st, 2d, 3d, or 4th day, a red eruption appears upon the skin, and after continuing for three, four, or more days, goes off in branny or thick broad scales; and after the cessation of fever, the disease frequently terminates in dropsy."

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2. "The Scarlet Fever may appear at any time of the year, but it most commonly begins in summer or autumn; and generally continues throughout the winter."

3. "Although great diversity obtains in the Scarlet Fever, yet the most important distinctions in practice are to ascertain, 1. When the disease is of an inflammatory nature; and 2. When it is attended with a disposition in the throat in particular, and in the system in general, to putrefaction."

4. "In the treatment of the mild species of Scarlet Fever, as described by Sydenham, little more is necessary than a proper attention to regimen."

5. "In the Scarlet Fever attended with erysipelatous inflammation of the throat, without floughs or ulcerations, antimonials given in such doses as to prove gently emetic, an antiphlogistic regimen, and detergent gargles, are the chief remedies to be depended on."

6. "In the Scarlet Fever attended with a mild ulcerated sore throat, in the beginning, and while the action of the vessels is strong, the same remedies as above are indispensably requisite; and as soon as the action of the vessels is abated,

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the chief dependence ought to be placed in the Peruvian bark.

7. " When the Scarlet Fever is attended with gangrenous ulcers in the throat; and a disposition to putrefaction in the system, the bark ought to be prescribed in large doses, and an antiseptic cordial regimen pursued from the beginning."

8. " Though the above general rules, with respect to the method of cure, are the result of experience; yet, in a disease, which assumes such a variety of symptoms and appearances, the proper method of treating particular cases must depend upon the sagacity and judgment of the physician; and a careful attention to the nature of the epidemic."

To this part of Dr Clark's Work is added a Postscript, containing a short account of the Scarlet Fever and Sore Throat, from the treatise lately published by Dr Withering, and from the second volume of Dr Cullen's *First Lines of the Practice of Physic*; and we are also here presented with an analysis of Dr Cotton's letter to Dr Mead *on a particular Scarlet Fever prevalent at St Albans near London*, in the year 1748; which seems to have been essentially the same epidemic
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so well described by Dr Fothergill under the title of the *Putrid Sore Throat*. Our Author introduces Dr Cotton's account with more particular pleasure, as their sentiments perfectly coincide, concerning the impropriety of altering the name of the disease.

This Work is concluded with an Appendix, containing tables of the diseases of the patients admitted to the Newcastle Dispensary under the Author's care, during the space of two years, together with remarks on the method of improving medical returns. For his remarks however, on this subject, after the length to which the present article has already extended, we must now refer our reader to the Work itself. And although we have endeavoured to give a pretty full account of it, yet we may conclude with observing, that it every where abounds with observations of such importance in practice, as cannot fail amply to reward the labour of a careful perusal.

III.

Ed. Sandifort, *Medicinæ, Anatomes, et Chirurgiæ, in Academia Batava, quæ Leidæ est, professoris, Observationes Anatomico Pathologicæ; Liber tertius.* 4to. Lugduni Batavorum.

IN this publication we are favoured with a continuation of ingenious observations, the preceding parts of which were communicated to the public a considerable time ago.

The first Article contains a very particular description of an umbilical hernia in a child who died almost immediately after birth. The mother in the third month of pregnancy had received a violent fall, upon ice, to which severe pains succeeded, and continued till the end of the seventh month, when she was delivered of this child.

Our Author having obtained the liberty of dissecting the body, he not only gives us a most accurate account of the different appearances observed in it; but to render the whole as intelligible as possible, a complete set of plates are subjoined, in which very exact views of the different parts are exhibited.

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In this umbilical tumour, the liver, spleen, and part of the stomach and intestines were contained, and various preternatural appearances were detected in the heart, kidneys, and bladder ; but the nature of this publication will not admit of our entering into such a particular detail of these as would be necessary for conveying an exact knowledge of the several particulars.

In Chapter second, we are favoured with a very minute account of the dissection of a body, in which a great proportion of the pia mater was found ossified ; no detail however is given of the effects produced by this circumstance, during the latter part of the patient's life.

Chapter third, contains the particulars of a case of suppression of urine, which ended fatally, and on dissection a stone impacted in the urethra was discovered to be the cause.

Chapter fourth, is entitled “ de calculo lacrymarum viis exsecto ;” of this the following are the particulars :

A young lady had complained for some time of a small tumour on the under palpebra, and near the internal angle of her left eye. It was attended with some pain, a constant discharge of tears over the cheek, and now and then, especially in the

morning, a quantity of purulent matter was evacuated; various remedies had been tried, but with no kind of advantage.

On examining the tumour, it was found to be hard, and a small orifice was observed, at a little distance from the *punctum* of that eye-lid, from whence a quantity of pus was discharged by pressure; but no evacuation of this kind had any influence in diminishing the size of the swelling.

On different trials it was found, that although the tears still came over the cheek, yet the passage into the nose was not rendered altogether impervious, as by *Anells'* instruments, injections were made to pass from the *punctum* into the nose. But the tumour having now continued for a considerable time, and there being no appearance of removing it by external applications, it was at last determined to lay it open to the bottom. On doing so, a small pyriform stone was extracted, and the sore being properly dressed, a complete cure was very quickly obtained.

Chapter fifth, enumerates the particulars of a dissection, in which the peritoneum was not only thickened to a great degree, but in some parts was even in a cartilaginous state; and the liver, spleen,

spleen, stomach, large and small intestines, were found so firmly united into one mass, as to render it impossible, even by dissection, to separate the one from the other.

Chapter sixth, contains an account of an abortion in the fifth month of pregnancy.

Chapter seventh, gives the particulars of a dissection, in which the two kidneys were found firmly united into one mass, but with all the parts of each perfectly distinct.

Chapter eighth, enumerates various instances, of two or more of the bones of the skull being firmly united into one, either from the futures being altogether obliterated, or from their having been entirely wanting.

Chapter ninth, is entitled "de ossiculis futurarum." Here our Author takes occasion to prove, that the discovery of the ossa triquetra has in general been very improperly attributed to *Wormius*, for they were distinctly described by *Bartholin* at least twelve years before *Wormius* pretends to have first seen them; the first account given of them by the latter not having been printed till the year 1640; whereas it is evident that *Bartholin* had observed them in the year 1628. Various instances are here related

by our Author of skulls, in his collection remarkable for the number and size of the bones.

The tenth and last Section, is entitled, “ de ossibus, diverso modo, a solita conformatione abludentibus.”

As anatomists are daily discovering *lusus naturæ* in dissecting the softer parts of the body, so when we examine the skeleton with attention, various irregularities in its conformation are detected. Our Author here presents us with a number of instances of this kind, which from time to time have occurred to him in the formation of his collection.

IV.

A Physical Inquiry into the Cause and Cure of Fevers. By Garret Hufsey, M. D. 8vo. Dublin.

AN accurate investigation of the remote or occasional causes of fevers, being highly necessary in practice, our Author before proceeding to the immediate consideration of these disorders, gives a very minute detail of such circumstances as, under different modifications, are
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to be considered as the most frequent causes of febrile affections.

These are, air; food; exercise and inaction; sleep and watchfulness; the natural evacuations of the body with their several states of obstruction; and lastly, the various passions by which the body is affected.

After considering the general properties of air, our Author concludes that part of his subject with some remarks upon fixed air. The term *fixed air* he observes is in general very improperly used. Whenever the integral parts of a simple element are closely combined, such as fire, water, air, and earth, constituting by their union a complex body, neither of them can retain in such situations, these properties which specify them singly. Air in particular loses that compressibility and elastic force, which distinguish it in a state of aggregation. We call it then fixed air, and the expression is very proper; but it is difficult to conceive why the same term should be applied to that vapour which arises from the decomposition of any body. This vapour, far from being fixed, is volatile; and, far from being formed only of air, is a compound of several substances; for the same force, our Author re-
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marks, which is sufficient to disunite the constituent parts of any body, is sufficient to dissipate in the form of vapour such of them as are volatile; and hence, if fixed air and vapour were synonymous terms, we should admit as many species of the former as there are bodies that contain it.

Dr Hufsey differs widely from those who consider fixed air as the bond of union of bodies. He considers every particle of a body to be equally necessary with fixed air, for the union or existence of that body; for as all elementary particles have a reciprocal attraction, it must be an abuse of words, he thinks, to call any one of them the cement or bond of union.

It is true, he says, that lime and the calces of metals, recover their original nature, when they receive the vapour which arises from the decomposition of another body. If, indeed, calcination deprived metals, and calcareous stones, of nothing else than their elementary air, and if the vapour that reduces them contained nothing else, in that case there would be some foundation for admitting the cementing quality of this element. But neither of these suppositions are well founded: For the operation necessary for
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converting metals and calcareous earths into a calx, deprives them of other volatile principles as well as of air ; and the vapour which reduces them, contains not only air, but the rest of what they had lost. As a proof of this, our Author remarks, that of all the vapours used in such processes, there are none so fit as those which are inflammable, and which of course are replete with elementary fire or phlogiston.

As bodies in the mineral kingdom recover their primitive form, when they receive the volatile principles which they had lost during their decomposition, it has occurred to some, that, in similar circumstances, the same change would be wrought in the animal and vegetable substances which are decomposed by putrefaction. To determine whether there really be any analogy of this sort, a train of experiments have been made; and upon a partial view, it may seem that the event has been favourable to the theory in question. But on a more minute investigation, our Author is of opinion, that all the antiseptic effects which have usually been attributed to fixed air, depend almost entirely on the nature of the particles with which the air happens to be impregnated, and not merely upon the air itself.

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For although putrescent, vegetable and animal substances, have been rendered sweet by some vapours, yet others have the power of producing quite a contrary effect, as every one will be convinced, who leaves a piece of fresh meat exposed to the corrupted steams of any body in an actual state of putrefaction.

This opinion is much confirmed, when we consider, that the substances which afford the greatest proportion of an antiseptic vapour, are most commonly antiseptic themselves in a very high degree. Such are mineral acids, and the products of fermentation, tartar, vinegar, and spirits of wine; and, if the antiseptic powers of any body depended merely on the proportion of fixed air contained in it, considerable deviations ought necessarily to be introduced in various points of the present established practice. In that case, our Author remarks, that salt beef, which is generally supposed to be very productive of scurvy, would be had recourse to as an excellent remedy for its cure.

In treating of digestion, various arguments are introduced against the doctrine of fermentation: At the same time, that attempts are made to prove, that this process depends almost solely,
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if not entirely, on the solvent powers of the stomach and menſtruum contained in it. So far from the fermenting proceſs being neceſſary for diſteſtion, it never occurs, our Author ſuppoſes, but as a concomitant of indigeſtion; the ſymptoms and appearances of a complete indigeſtion being exactly ſuch as are obſerved in alimentary mixtures in a ſtate of fermentation.

In conſidering the ſeveral occaſional cauſes of fever, Dr Huſſey endeavours to prove that they all tend in a greater or leſſer degree to the production of ſuch a ſtate of the fluids, as muſt neceſſarily occaſion an obſtruction to their circulation; and it is this obſtruction, together with the reaction of the blood-veſſels, that muſt thereby be produced, which he thinks conſtitutes the generical nature of fever. With reſpect to the ſpecific differences of fever, he has no doubt of their depending ſolely upon the particular changes induced upon the circulating fluids; which however different from one another, have one thing in common, that of diſturbſng the freedom of circulation.

The only changes which our Author ſuppoſes can be made in theſe fluids, ſo as to render them unfit for a due circulation, may be reduced

ced to three, *viz.* a viscosity of the chyle; a coagulation of the serum; and a broken texture of the red globules. It may seem, he says, that the two first changes bear the same signification; there is, however, he observes, a real difference, for when the chyle is viscid, all the rest of the humours must be poor and ropy; whereas when the serum is coagulated, the blood-globules have a great degree of firmness. And again, the fibres are weak and relaxed in the first case; but in the second, they are strong and elastic; besides, the chyle, though viscid, can never be made hard, whilst the serum may be coagulated so as nearly to acquire the consistency of leather.

Continued fevers are divided by our Author into the inflammatory, the putrid, and compound fevers. The first of these, he supposes, proceeds in every instance from a stiness of the blood; the putrid fever, from a dissolution of the humours; and the compound fever, from a combination of the two.

As the method of cure in every fever is to be regulated entirely by an accurate knowledge of the cause; and as the cause can never be exactly detected but from the appearance of the blood,

blood, we are desired, therefore, on the first formation of fever, always to draw off a small quantity of blood. If the blood appears firm and fizy, there can be no room to doubt of the fever being of the inflammatory kind ; if it is of a loose, soft, broken texture, then the fever is evidently of the putrid kind ; and again, when the blood, after cooling, is covered with a thin pellicle, which does not resist the pressure of the finger, and when the blood which lies under this pellicle is not quite so dense as that which is drawn in a fever purely inflammatory ; in that case, the fever is denominated compound.

In the cure of *inflammatory fever*, blood-letting is recommended as the remedy chiefly to be depended on ; and the quantity to be discharged, is directed to be regulated, not only by the violence of the symptoms, but by the consistency of the size ; which last circumstance, our Author seems to consider as the most material index for all our practice, in the treatment of this species of fever.

Together with blood-letting, cooling, laxative, diuretic medicines are recommended ; and particularly, such articles as are known most effectually to assist perspiration. The grand object
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of all these, being the expulsion by the several outlets, of the fizy particles of the blood, which are too gros to move easily forward in the common course of circulation.

Warm alexipharmic medicines are much condemned by our Author, as tending, by the increase of heat which they occasion, to produce a farther inspissation of the humours. But, blisters, although they do probably produce a transitory increase of heat, and from that circumstance might be supposed to be improperly used here; yet it is certain, our Author remarks, that they give great relief in inflammatory fevers; and this they do, he supposes, by the active parts of the cantharides being absorbed into the circulation, where, by their attenuating properties, the fizyness of the humours comes to be considerably diminished.

For effecting a total dissipation of this fizyness of the blood, dilution with watery drinks is much recommended. Water alone, however, not acting as a proper solvent for size, a quantity of saccharine, or acid vegetable juices, are desired to be added to it.

In the cure of *putrid fevers*, blood-letting carried to any extent is much condemned by our Author;

Author ; but a small bleeding at first, he considers as absolutely necessary ; for unless by seeing the blood, he thinks it is impossible, at an early period of the disease, to form a true diagnostic.

Gentle pukes, and laxatives, are desired to be given at proper intervals, through the whole course of the disease, so as effectually to evacuate those putrescent humours which, in such fevers, are always collected in the stomach and bowels. No violent medicines, however, should be used ; and we are here particularly cautioned against the use of James's powder, the operation of which, in such fevers, our Author considers as highly pernicious.

Blisters, by the alkaline particles of cantharides which they introduce to the circulation, being very apt to produce a dissolution of the blood, are therefore condemned as improper in every instance of putrid fever ; excepting perhaps in the beginning of the disease, when, by the drain they produce, and which is frequently kept up during the course of the fever, they may be of some service ; and, as at this period the dissolution is not supposed to be much ad-
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vanced, they may be had recourse to, Dr Hufsey imagines, without any kind of risk.

In the compound fever, which our Author considers as a complication of the inflammatory and putrid fevers, the first indication of cure which he recommends, is to attenuate the sizyness of the blood, which, in the beginning of the disease, always prevails; and the second, is to guard against the progress of the putrefactive ferment, which, in the more advanced stages of this fever, is always sure to occur. To cure the compound fever, we should begin with those means which we employ advantageously in the treatment of fevers purely inflammatory; and ought to end with those which are found successful in the cure of what is merely putrid.

Dr Hufsey concludes his observations on every species of fever, with different cases, by which he endeavours to establish the propriety of the principles laid down. And having made some remarks on the nature and cure of intermittent and remittent fevers, he concludes the whole with a short but accurate dissertation on the various febrile affections to which lying-in women are liable.

V.

Experiments establishing a criterion between Mucaginous and Purulent Matter ; and an Account of the retrograde Motions of the absorbent Vessels of animal Bodies in some Diseases. 8vo. Lichfield.

THE work before us was written some years ago by a very ingenious young gentleman the late Mr Charles Darwin of Lichfield. These papers are now published from the manuscripts which he left behind him. The Editor of the present work, Dr Darwin of Lichfield, informs us, in a note, that he has in his possession some other ingenious papers by the same author, which it is to be hoped will soon be published.

The present publication, as must appear from the title, consists of two Parts. The first Part, which contains the experiments establishing a criterion between pus and mucus, was presented to the Æsculapian Society of Edinburgh in the year 1778, who unanimously conferred upon the Author of it their prize-medal for that year. The experiments themselves do not admit of an analysis ; and, of the conclusions drawn from them, we have already given a full account in a former

number of this Work. It will now, therefore, be sufficient to repeat the general conclusion, which is in the following words: When any one wishes to ascertain the composition of expectorated matter, let him dissolve it in vitriolic acid, or in caustic alkaline lixivium; and then add pure water to both solutions. If there be a fair precipitation in each, he may be assured that some pus is present. If in neither a precipitation occurs, it is a certain test, that the matter is entirely mucus. And if it cannot be made to dissolve in the alkaline lixivium, there is also reason to believe that it is pus.

In the second, which is by much the most considerable Part of this Work, Mr Darwin endeavours to shew, that the phænomena of various diseases can only be explained upon the supposition of a retrograde motion of the absorbent vessels.

After giving, in the first Section, a distinct account of the absorbent system in general, he proceeds to shew, in the second, that the valves of the absorbent vessels may suffer their fluids to regurgitate in some diseases. He observes, that the many valves which occur in the progress of the lymphatic and lacteal vessels, would indeed seem

seem insuperable objections to the regurgitation of their contents; but as mercury, water, or suct, can be easily made to pass these vessels in a contrary direction to the natural course of their fluids, and as these vessels, with their valves, are undoubtedly endued with life, he thinks it probable, in some diseases where the valves and vessels are stimulated into unnatural exertions, or are become paralytic, that during the diastole of the part of the vessel to which the valve is attached, the valve may not be so completely closed as to prevent the relapse of the lymph or chyle.

The mouths of the lymphatics, he observes too, seem to admit water to pass through them after death, more easily the inverted way than in the natural course, since an inverted bladder readily lets out the water with which it is filled. And as the strong valves with which both orifices of the stomach are furnished, and likewise the valve of the colon, are frequently known to admit of a regurgitation of the contents of these viscera, the possibility of such an occurrence in the lymphatic system is thereby put beyond a doubt. By Dr Haller's microscopic experiments too, it is rendered certain, that in the veins which we

know to be endowed with valves, a regurgitation of their contents is very easily induced ; he having observed, that in dying animals, a retrograde motion of the blood is produced from the heart itself to the very extremity of the limbs. From the strictest analogy, therefore, our Author concludes, that if the course of the fluids in the lymphatic vessels could be subjected to microscopic observation, they would also, in the diseased state of the animal, be seen to repass the valves, and the mouths of those vessels which had previously absorbed them.

In Section third, our Author endeavours to shew, that as the intestinal absorbents are now known to join with the urinary lymphatics by frequent anastomoses ; we are hence, on the supposition of a retrograde motion of these vessels, enabled to account for the daily instances that occur, of fluids passing from the stomach into the bladder much more quickly than they could possibly do through the common course of the circulation. In Etmuller's Works, various instances are recorded, where simple water, wine, wine with sugar, and emulsions, were discharged, by urine, unchanged.

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Dr *Kratzenstein* put ligatures on the ureters of a dog, and then emptied the bladder by a catheter; yet, in a little time, the dog drank greedily and made a quantity of water. And in the *Philosophical Transactions* for the year 1670, a similar experiment is related with the same event. The following experiment too, which was made under the eye of our Author, tends greatly, he thinks, to confirm this opinion.

June 14. 1772. A friend of Mr Darwin's, on drinking repeatedly of cold small punch, till he began to be intoxicated, made a quantity of colourless urine. He then drank about two drams of nitre dissolved in some of the punch, and eat about two stalks of boiled asparagus. On continuing to drink more of the punch, the next urine that he made was quite clear and without smell; but, in a little time, another quantity was made, which was not quite so colourless, and had a strong smell of the asparagus. He then lost about four ounces of blood from the arm, but the smell of asparagus was not at all perceptible in the blood, neither when fresh taken, nor the next morning; yet this smell was strongly perceived in

the urine which was made just before the blood was taken from the arm.

Some bibulous paper, moistened in the serum of this blood, and suffered to dry, shewed no signs of nitre by its manner of burning; but some of the same paper, moistened in the urine, and dried, on being ignited, evidently shewed the presence of nitre. This blood and the urine stood for some days exposed to the sun in the open air, till they were evaporated to about a fourth of their original quantity, and began to stink. The paper which was then moistened with the concentrated urine, shewed the presence of much nitre by its manner of burning, whilst that moistened with the blood shewed no such appearance at all. And hence our Author thinks it may be clearly inferred, that certain fluids, at the beginning of intoxication, find another passage to the bladder, besides the long course of the arterial circulation.

In Section fourth, the doctrine here advanced, of a retrograde motion of the lymphatics, is applied towards the explanation of the phenomena of diabetes and of some diarrhoeas. All the branches of the lymphatic system, our Author observes,

observes, have a certain sympathy with each other, infomuch, that when a branch is stimulated into any unusual motion, some other branch has its motions, either increased or decreased, or inverted at the same time. Thus when one drinks a moderate quantity of vinous spirit, the whole system acts with more energy, by concert with the stomach and intestines, as is seen from the glow on the skin, and the increase of strength and activity; but when a greater quantity of this inebriating material is drunk, at the same time that the lacteals are excited into greater action to absorb it, the urinary branches of the absorbents which are connected with the lacteals by many anastomoses, may have their motions inverted, and a great quantity of pale unanimalised urine will be discharged.

If this ingurgitation of too much vinous spirit shall often occur, the urinary branch of absorbents at length gains a habit of inverting its motions whenever the lacteals are much stimulated; and the whole, or a great part of the chyle, is thus carried to the bladder, without entering the circulation, and the body becomes emaciated. In this species of the disease, which
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may be termed the *chyliferous diabetes*, the urine is sweet, and of the colour of whey ; which are circumstances that distinguish it sufficiently from every other species of the disorder.

The purging stools occasioned by exposing the naked body to cold air, or sprinkling it with cold water, originate, our Author remarks, from a similar cause ; for the mouths of the cutaneous lymphatics, being suddenly exposed to cold, become torpid, and cease, or nearly cease, to act ; whilst, by some kind of sympathy, the intestinal lymphatics invert their motions, and immediately what was previously absorbed, is returned into the intestines. An obstructed perspiration merely, Mr Darwin observes, is not sufficient to account for this phænomenon, as it frequently happens, that at the very instant the body is exposed to the effects of cold air, an unusual movement is felt in the bowels, which could not, he thinks, from that circumstance, be so instantaneously produced.

In Sections fifth, sixth, and seventh, our Author proceeds to explain upon the same principle, the phænomena of dropsies, of cold sweats, and of the translations of matter, of chyle, of milk, and of urine. The operation of purging drugs,

drugs, applied outwardly, is thus likewise accounted for.

In Section eighth, various circumstances are enumerated, by which the fluids that are effused by the retrograde motions of the absorbent vessels, may be distinguished. Section ninth, contains a synopsis of diseases supposed by our Author to originate from the retrograde motions of the absorbent vessels. Section tenth, contains answers to such objections as our Author supposes may be made to his theory; and in the eleventh Section he enumerates various causes which induce the retrograde motions of animal vessels, and the medicines by which the natural motions may be restored.

As Mr Darwin considers debility as the principal cause of the retrograde motion of vessels, and as animal debility, he thinks, is owing to a defect of stimulus, or of irritability, when the vascular muscles therefore are not excited into their due action by the natural stimuli, we should exhibit, he remarks, those medicines which possess a still greater degree of stimulus; amongst these are, the foetids, volatile aromatics, bitters, metallic salts, opiates, wine, moderate exercise, cheerfulness of mind, change of air to a warmer country,

country, and perhaps occasionally the external stimulus of blisters.

Towards the end of this Publication, several cases of dropfical complaints are related, in which the fox-glove, or *digitalis purpurea* was exhibited. In the greatest part of these, this medicine acted violently both as a cathartic, emetic, and diuretic; in some, these evacuations proved salutary, but in others they either had no apparent influence, or produced no other effect than that of reducing and weakning the patient's strength. The two following cases, selected from the whole, will serve as examples of its effects.

A lady between forty and fifty years of age who had been indisposed some time; was then seized with cough and fever, and afterwards expectorated much digested mucus. This expectoration suddenly ceased, and a considerable difficulty of breathing supervened, with a pulse very irregular both in velocity and strength; she was much distressed at first lying down, and at first rising; but after a minute or two, bore either of these attitudes with ease. She had no pain or numbness in her arms; she had no hectic fever nor any cold shiverings, and the urine was in due quantity, and of the natural colour.

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The difficulty of breathing was twice considerably relieved by small doses of ipecacuanha, which operated upwards and downwards, but it returned in a few days. She was then directed to take the fox-glove in decoction; prepared by boiling four ounces of the fresh leaves, from two pints of water to one pint, to which was added two ounces of vinous spirit; she took three large spoonfuls of this mixture every two hours, till she had taken it four times; a continued sickness supervened, with frequent vomiting and a copious flow of urine; these evacuations continued at intervals for two or three days, and relieved the difficulty of breathing. She had some relapses afterwards, which were again relieved by the repetition of the decoction of fox-glove.

A tradesman about fifty years of age, became weak and short of breath, especially on increase of motion, with pain in one arm about the insertion of the biceps muscle. In the night he sometimes made an unusual quantity of pale urine. He took calomel, alum, and Peruvian bark, but all his symptoms increased. His legs began to swell considerably; his breathing became more difficult, and he could not lie down in bed, but
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all this time he made a due quantity of straw coloured urine.

The decoction of fox-glove was given as in the preceding case, and it operated chiefly by purging, and seemed to relieve his breathing for a day or two ; but it also seemed to contribute to weaken him. He became some weeks thereafter universally dropfical, and died comatose.

We have thus endeavoured to give some account of the doctrine contained in this Essay, and although perhaps but few of our readers may, at first, be disposed to adopt this idea of retrograde motion in the absorbents, yet we are persuaded they will in general admit, that it is both new and ingenious. But for a more satisfactory view of the idea, as well as of the arguments by which it is supported, we must refer them to the Work itself. And it will be no unpleasing gratification to their curiosity, to peruse a short account of the life of the Author, which the Editor has annexed to the Publication.

VI.

Clinical Experiments, Histories and Dissections. By Francis Home, M. D. *one of his Majesty's Physicians, Fellow of the Royal College of Physicians of Edinburgh, and Professor of Materia Medica in the University of Edinburgh.* 8vo. Edinburgh.

THE Work before us which we formerly took an opportunity of announcing, contains the result of industrious and accurate observation for the space of several years. While ingenious speculations afford pleasure to the inquisitive mind; the united efforts of unwearied attention and solid judgment on subjects strictly practical, cannot fail to afford the highest satisfaction to those engaged in the actual exercise of the profession. Such however is the nature of the volume now before us; and we have little doubt that the conclusions here drawn from extensive experience, will be found conducive to the improvement of medicine.

It has long been a matter of dispute, and it is unquestionably of the utmost importance in the practice of physic, to determine at what time the

the Peruvian bark may be exhibited with greatest advantage in the cure of intermittent fevers. On this subject, as the result of many trials, 14 of which are here particularly related, Dr Home concludes, that the Peruvian bark is more efficacious in stopping the paroxysms of an intermittent, when it is given soon after a fit, than when exhibited a short time before it. And he even concludes, that from this latter mode of exhibition, it adds to the severity of the succeeding paroxysm.

From observing that the Peruvian bark is most successful when it is given at the greatest distance from the fit, Dr Home infers, that a considerable time is required for its operation; and from this he thinks it highly probable, that its effects do not arise from an action on the stomach, or on its nerves alone, but principally depend on its entering the vascular system.

He finds, that there is no difference in the effects of bark given after the fit, whether the type be, quotidian or tertian. He thinks, therefore, that the distinctions of intermittents, so often mentioned by medical writers, are of little use in practice. And as the different kinds so often alternate with each other, he concludes, that

that the cause of their different appearances is not owing to different miasmata, but probably to some more changeable circumstances of the patient.

In the second Section, the Author relates many experiments made with different remedies in the typhus nervosus. From nine different trials with the tincture of cantharides, it appears, that this medicine taken to the extent of 20 drops, thrice a day, is a very safe remedy. He thinks, that in most of the cases there could be no doubt that the medicine was of great utility; but he observes, that more experiments are still required to ascertain its value. From his experiments with blisters he concludes, that they are of little use in typhus. Yet he considers them as of the greatest utility in relieving the severe head-ach which always attends it, when they are applied to the temples. And this mode of application, while it is in many respects more convenient than blisters to the head, he thinks, supercedes the use of that practice.

From the result of many trials made with antimonial medicines, Dr Home concludes, that James's powder is a more valuable remedy in typhus than emetic tartar. He finds, that the

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effects of tartar emetic as an evacuant in particular, are never stronger than those of James's powder; and that it is by no means so useful in typhus as in synochus. From this circumstance, without pretending to settle the mode of operation, he thinks we may negatively conclude, that antimonials do not cure fevers by evacuation: From several circumstances, he infers that rather by a general stimulus.

From his trials with opiates he concludes, that they procure rest in typhus, without any disadvantages attending their use. He thinks, that in every case of such fevers, opium is more to be depended upon than camphire, castor, or the *sal sedativum* Hombergii; and particularly, that it is more necessary and more useful than these sedatives where the patient is affected with looseness or cough.

In the sixth Section, Dr Home relates many experiments upon some remedies used in *phthisis pulmonalis*. From three trials with the vitriolic acid, our Author concludes that little advantage can be obtained from it. He finds that it tends very much to promote purging, even although joined with mucilage of gum arabic, and accompanied with opiates. From a trial made with

with alum, he found that it quickened the pulse, without producing any good effect; and that it had no power in curing the disease. Former experience had led him to consider the Peruvian bark as being hurtful in phthisis, and this opinion he found confirmed by another trial. From starch, as a demulcent and incrassant, he found some benefit; and he thinks that it may be useful where the expectoration is thin, in small quantity, and attended with much tickling in the trachea and fauces. From different trials with mephitic air, it appeared to be of some use: But he thinks that more experiments are necessary to ascertain its effects, and the degree of credit which it deserves.

In the seventh Section, Dr Home relates three histories of a singular affection, the *melæna* or *morbus niger*. From these histories he concludes, that the disease does not depend upon the *atra bilis*, as has commonly been imagined, but that it is owing to blood effused from the *meseraic* veins. In the three cases which are here related, although the crisis did not happen in all of them exactly on the same day, yet there appeared to be a very great coincidence in point of time with the crisis of fevers in general, one

terminating on the 8th, and two others on the 14th day. The first patient was cured by the continuation of purging, and the second by sweat and thick urine; but the third had no evident critical evacuation.

With respect to the cure, he considers bleeding as necessary, if the pulse will admit of it; he thinks that emetics are always hurtful. He concludes that gentle laxatives are beneficial; and he found benefit from the vitriolic acid, when given with mucilage of gum arabic, which he recommends as being the article best fitted for covering its taste, and diminishing its effects on the *primæ viæ*.

From several experiments which he made with the *rhododendron chrysanthemum* of the *pharmacopœa Rossica*, which has lately been very warmly recommended for the cure of rheumatism, he found that it affected the head with pain and giddiness, that it produced nausea, and sometimes opened the belly; and that it produced plentiful sweat, when the state was not inflammatory. He found that it produced a disposition to sleep; and he pronounces it one of the most powerful sedatives which has yet been discovered. For in most of the trials, it made
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the pulse remarkably slow, and in one reduced it to 38 strokes in the minute. He considers it however as being in the cure of rheumatism a medicine much inferior to several others, particularly to the pulvis Doveri.

In the tenth Section, Dr Home relates several trials made with Sir Hans Sloan's ointment for the cure of the leucoma. This ointment is prepared in the following manner :

R. Tutt. ppt. unc. fs. lap. hæmat. ppt. scrup. i. aloes. succotr. levig. gr. vi. Margarit. ppt. gr. ii. leviga optime simul et misce cum axung. viper. q. s. ut f. liniment. ophthalmicum. Of this ointment a little was applied twice a day, if there was any tendency to inflammation, and if not, as often as they pleased. In the trials which he made with this ointment, although at first it excited considerable inflammation, yet it had at last the effect of removing the speck, and restoring to the cornea its natural pellucidity ; from which Dr Home concludes, that it is a medicine of much efficacy in a disease otherwise incurable.

In the 11th Section, Dr Home gives an account of a great variety of experiments made with different antispasmodics: As an antispasmo-

dic he employed blood-letting with success in allaying idiopathic singultus; and he thinks that it may be considered as a general remedy in the cure of that disease. From his trials with valerian, he is inclined to pronounce it a weak and often a hurtful medicine. From the experiments also which he made with the folia aurantiorum, he is inclined to call in question the antispasmodic powers of that medicine. He draws also the same conclusion with regard to the cardamine pratensis or cuckow flower.

With regard to the comparative powers of antispasmodics in general, he thinks they may be referred to four classes. Under the first and weakest, he includes, fol. aurant.; flor. cardamin.; artemisia; peonia; viscus quercinus; extractum hyoscyami; castor; musk; cup. ammon.; and electricity. To the second class he refers camphora; calx of zinc, and blisters. To the third assafoedita, æther, and mercury; and to the fourth, Peruvian bark, opium, and blood-letting. But he concludes with observing, that particular antispasmodics are suited to the cure of particular spasmodic diseases; and he remarks, that although his experiments have
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shewn this fact, they have not discovered the cause on which it depends.

As a remedy in paralytic cases, he made trial in six instances with the *Doronicum Germanicum*, or German leopard's bane, the *arnica montana* of Linnæus, which has of late been highly extolled by Dr Collins of Vienna, and some other physicians. From these trials, however, he is not disposed to form a very favourable judgment of it; yet from its stimulating power in the *primæ viæ* and on the affected muscles, he thinks there is reason to hope that it will be of some service. From the hot bath, when used to as great a degree of heat as the patients were able to bear it, he derived no benefit; and he is inclined to think, that the good effects derived from natural hot baths, may depend on mephitic air or other impregnations.

In the 12th Section, seven cases are related of obstinate sciatica, five of which were cured, and the two others relieved by means of the *oleum terebinthinæ*. It was exhibited according to the following formula.

R. Ol. tereb. drach. ii. mell. opt. unc. i. M. f. linct. cap. coch. parv. mane et vesp. superbibendo haust. potus communis tepidi. The sen-

sible operation which Dr Home observed from this medicine was various. It often produced a sense of heat in the stomach, and diminished the appetite. It heated the part affected, and raised a peculiar sensation of pain there. It sometimes proved diuretic; and when used in a great quantity, it brought on strangury. Dr Home observes, that it is difficult to explain its operation; but, from the peculiar sensation of heat and pain which is felt in the part soon after each dose, he is inclined to think that it acts topically.

In cases of lumbago, a disease nearly allied to sciatica, Dr Home derived great benefit from the following application.

Rx. Camph. scrup. i. dissolut. in ol. tereb. drach.
 ii. Sal cor. cerv. gr. xv. Pulv. sem. cymin. drach.
 ii. dein. add. ung. nervin. unc. fs. sapon. nigr. com. unc. i. M. f. linim. extende super alutam et applic. lumbis. This liniment, which was renewed every three days, produced salutary effects in a short time.

In the 17th Section, Dr Home relates many experiments made with different remedies in different cases of dropsy. After having given a short history of the introduction of cream of tartar

tar against such affections, he relates particularly its effects in twenty cases in which he tried it. Of these, it produced a complete cure in fourteen; and he remarks, that although the distemper be very liable to suffer a relapse, yet this happened in none of these.

To determine its mode of operation, from ascertaining which, he thinks, we may most certainly secure success from the use of it, he states the visible effects of this medicine. In one or two instances, he observes, it excited vomiting; in general, it purged the patient twice or thrice in the day with ease; but, in some cases, it seemed rather to bind the belly; it generally increased the quantity of urine, but not to so great a degree as squills, or the like; it very commonly mended the appetite, and diminished the thirst, heat, and fever. From these observations, he concludes, that it acts in some degree as an evacuant; but since much more powerful evacuants have by no means equal effects, he is inclined to think, that its principal operation depends on its power as a deobstruent.

On the subject of squills, he observes, that from the common method of using them, he seldom met with success; but an accidental discovery

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very suggested a method of exhibiting them, from which he derived very considerable advantage. This he styles the emetic method; and with this view the squills were generally exhibited in the following form. *Rx.* Pulv. rad. scill. exsic. gr. iii. sal. nitr. Pulv. nuc. mosch. aa gr. x. fyr. simp. q. s. M. f. bol. Cap. mane et repetat. quotidie. The visible effects of this mode of exhibition are, that the squills at first purge and encrease the urine, from which the hydropic swellings are sometimes a little reduced. But in a few days, nausea and vomiting comes on, which is often severe, and attended with acute pain in the stomach, and remarkable slowness of the pulse. During the vomiting, much fluid is thrown up, and the abdomen falls in proportion. In this way the hydropic symptoms disappear; and, in a short time, for the most part within the space of 16 days, the disease is completely cured. Of ten hydropic cases treated in this manner, seven were cured, which must be allowed to be a large proportion. In some instances, the evacuation was so sudden as to require bandages to the belly.

Besides these observations on the internal remedies in dropsy, he relates two cases of anasarca,
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in which issues were used with success; and he observes, that he never saw them attended with any disadvantage. He considers them as being much preferable to incisions, which soon heal up, and must be renewed.

In cases of amenorrhœa, compression of the crural artery succeeded only in one case of six in which it was tried. The pulvis sabinæ taken to the quantity of a scruple thrice a-day, succeeded in three cases of five. But the root of rubia tinctorum, or madder, appears to Dr Home to be a still more powerful emmenagogue. Of 19 cases here related, 14 were cured by it. It was given to the quantity of half a dram, or even of a dram, twice, or oftner in the day. It has scarcely, he observes, any evident effects. It never quickens the pulse, or lies heavy on the stomach; and, in general, restores the discharge before the 12th day.

In eruptions of the herpetic kind, Dr Home found, that the tincture of cantharides considerably alleviated the disease, but seldom produced a complete cure. He found little benefit from the cortex interior ulmæ, as recommended by Dr Lysons; nor did he derive greater advantages from the vitriolic acid.

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After some observations on the diagnostic symptoms of worms in the alimentary canal, among which he considers an œdematous swelling of the alæ narium, upper lip, and often of the contiguous parts of the cheeks, as the only certain mark, he relates several experiments, from which it appears, that the *Spigelia Marylandica*, or Indian pink, is an effectual and valuable vermifuge. It was given, in general, to the extent of ten grains twice in the day; and its only obvious operation was that of gently moving the belly and discharging the worms.

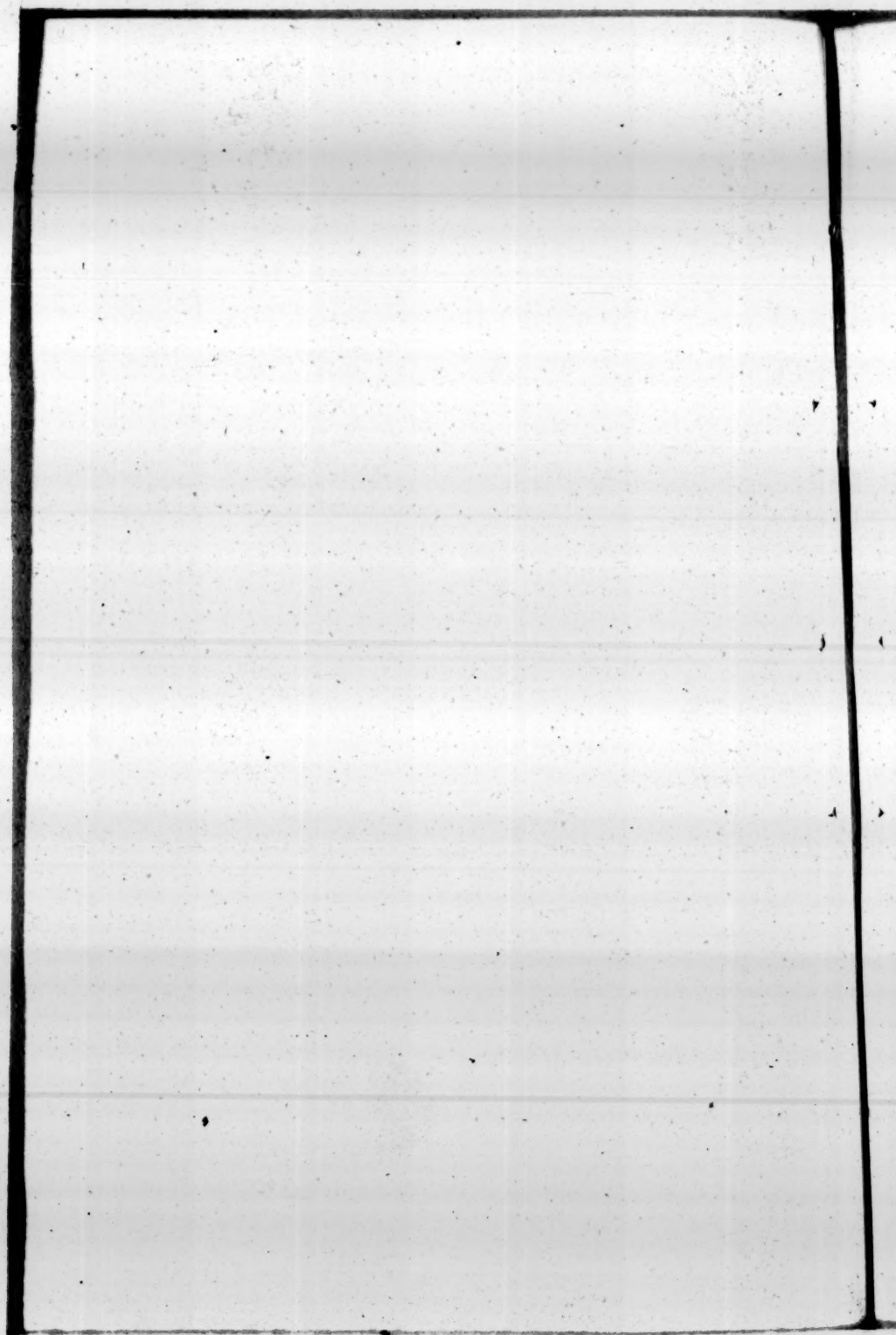
From several trials, Dr Home concludes, the deobstruent powers of mezereon to be very strong. He found it reduce schirrous swellings which appeared incurable, and in which a course of mercury had failed.

From several trials, he found, that a decoction of verbascum, the white or cow's lungwort, was useful in diminishing or stopping diarrhœas of an old standing, and had often very considerable effect in easing the pains of the intestines. From dry cupping, he experienced remarkable effects in restraining hæmorrhages, particularly from the uterus, and he considers it as a much more powerful remedy than is in general imagined.

In

In the last Section, Dr Home relates several experiments on different lithontriptics. From experiments made with caustic lie, he was inclined to form an unfavourable opinion of it, as the symptoms of some patients appeared to be aggravated by it ; yet he found, that the urine of patients taking it, enjoyed some power of dissolving calculi. He found, that from the use of mephitic water, the urine was in some degree impregnated with mephitic air, but that it acquired no power of dissolving calculus.

We have thus endeavoured to present our readers with some of the most important conclusions contained in this valuable practical Work ; but for the evidence on which they are rested, we must refer them to a candid consideration of the experiments in the original.



S E C T. II.

Medical Observations.

I.

Case of the successful Treatment of Hydrocephalus Internus, by Mercury. By Mr John Mackie, Surgeon in Huntingdon.

JOHAN ALGOOD, aged 27, of a thin habit of body, accustomed for four or five years past to work in a tan-yard in a very stooping posture, was attacked in the beginning of May with an irregular intermitting fever, accompanied with much pain in his joints. These complaints continued till about the middle of June, when he was

was seized with a violent and constant pain in the back part of his head, attended with great giddiness, noise in his head and ears, dimness of sight, &c. and his fever became more continued. He lay in this state upwards of a month, without receiving any benefit from some medicines which he took during this period.

I was called to him in the middle of July, and found him labouring under the following symptoms: A fixed pain on the right side and back part of his head, which was frequently so acute as to make him quite outrageous, crying out, tearing his hair, beating himself on the head, &c. He had such a giddiness, that, unless strongly held, he could not support himself a moment in an upright posture. He could not bear the light, and when he did venture to open his eyes, could not see objects distinctly. His pupils were uncommonly dilated, and his right eye seemed drawn outward, and rather contracted in its volume. He complained of a strange palpitating noise in his head and ears, and said, he felt at times as if there was a weight of water falling from one side of his head to the other. He was, in general, sensible; but on asking him two or three questions together, he became confused,

fused, and, like a person with an oppressed brain, answered, with hesitation, quite wide of the question, and often opposite to what he meant. Along with these, he had a hot skin, a small quick pulse, thirst, a foul tongue, urine in small quantity and high coloured ; he was emaciated, sick, costive, and sweated much ; had often a kind of stupor, but very little sleep. Once in the 24 hours, he had generally a remission (of three or four hours continuance) of the febrile symptoms, but of none of the other complaints.

What follows are the notes I kept of the progress of the disease, and its treatment.

July 16th. Ordered three or four leeches to be applied to each temple immediately ; an emetic to be taken in the evening, and a cooling purge to-morrow morning.

17th. Called in the evening, and found the leeches had taken away a good deal of blood, and the vomit and purge operated well. No change in the complaints, except that the sickness is a little abated. He screamed greatly on attempting to raise his head from the pillow.

Ordered his head to be shaved, and a sharp blister to be applied all over the occiput, large enough to cover the nape of the neck ; also,

one on the inside of each leg. Internally,—
R. Nitri puri, dr. fs. Gum. camphor. gr. iv. *M. f.*
 pulvis; quarta quaque hora sumendus durante fe-
 brili calore. *R.* Pulv. cort. Peruvian. dr. i. Pulv.
 rad. Valerian. sylv. dr. fs. *M. f.* pulvis, exhiben-
 dus quamprimum remissio appareat, & repeten-
 dus, si ultra horas tres pergat. Thin milk-gruel
 and barley-water for drink.

July 19th. The blisters have discharged much,
 and he has taken the medicines punctually; but
 the fever and other complaints remain as before.
 Pulse very irregular; pain in the head, and rest-
 lessness, extreme.

Left off the camphire, and in its stead added
 to each nitrous powder, tartar emetic, gr. $\frac{1}{4}$.
 Dressed the blisters with the unguent. ad vesica-
 toria.

21st. Two doses of the bark and Valerian
 were given during the two last remissions of the
 fever, which were full four hours each; but to-
 day there appears no kind of amendment. All
 the symptoms continue much the same. Shriek-
 ed out much, and talked incoherently, when I
 saw him. Has had no stool since he took his
 physic. Ordered a laxative glyster to be thrown

up

up directly, and the medicines to be continued as on the 19th.

23d. The glyster procured two motions. Has sweated profusely through the last 48 hours. Blisters have run freely. The two last diurnal remissions not quite so distinct. No abatement of the other complaints. The pain, giddiness, stupor, contortion of the eyes, &c. remain in as great a degree as when I first saw him. At this time, the long continuance of the disease, its hitherto having resisted every ordinary remedy, together with the still formidable appearance of the symptoms, made me almost despair of my patient; but having just seen the Cases published by Dr Percival and Dr Dobson, in which a set of similar symptoms were so successfully treated by mercury, I now began to think this a favourable opportunity for giving it a trial; therefore, I left off all other medicines, and ordered ten grains of calomel, made into a bolus with conserve of roses, to be taken at bed-time: At the same time, a dram of the strong mercurial ointment was directed to be rubbed into the ancles; and both to be repeated every night.

25th. Found no alteration. Fever and other symptoms the same. Blisters heal, having

been dressed these two days with basilicon. I ordered the calomel, and mercurial friction to be continued as on the 23d.

July 26th. I was sent for to him to-day, and found him complaining much of being griped. Had two purging stools in the last 24 hours. His gums were a little tender, and his breath beginning to be tainted. In other respects, as usual. Left off the calomel, and ordered a double quantity of the mercurial ointment to be rubbed into his thighs every night.

28th. I saw every face about my patient pleased. They told me, he had had a calmer night than any these two months past. For the first time, he said the pain of his head was abated; he looked more composed; his skin felt cooler; his pulse more full, and not so quick. He complained of his mouth being sore, and his tongue swelled; and had discharged a good deal of saliva in the night.

I ordered only one dram of the ointment to be rubbed in, for the two next nights.

30th. He spit about three quarts during the last 48 hours, and complain of much heat in his mouth; but, to my great satisfaction, I found all his other complaints better. Pain in his
head

head almost gone, excepting now and then a shoot. Giddiness much abated. He said he often felt a trickling kind of motion, as of water running along the inside of his temples; but this sensation was without pain. He could sit up in bed and feed himself; was sensible and in spirits. Pulse regular, and not above 70 in a minute. He has had a remission of upwards of six hours to-day; ordered the ointment to be left of.

Aug. 1. Continues to spit freely. Had yesterday a smart return of the fever, which however only held him about 12 hours. To-day there is a perfect remission, and he is in every respect greatly mended. Has had some hours good sleep. Complains very little of pain. Got out of bed for the first time; sat up three hours; and could even bear the light without being disturbed by it. Complained of being hungry.

Allowed plenty of milk-porridge and small broth.

3d. The spitting keeps up to about a quart in the 24 hours. Found him out of bed to-day, and almost without complaints. He told me, his head was well, and that he only wanted strength, and to get rid of his fever and sore mouth. The remissions were now almost as

long as the paroxysms, being about 12 hours each. Has taken no medicine internally since he left off the calomel ; and was costive.

I ordered him a dose of rhubarb ; and, after its operation, a dram of the bark every four hours during the remissions.

Aug. 6th. The spitting begins to decline. He has had no fever for the last 24 hours. He sleeps well ; and has an appetite, if the soreness of his mouth would let him eat. Head-ach and giddiness gone ; but his pupils still continue much dilated.

Ordered him another rhubarb-purge, and the bark to be continued every six hours.

9th. Has had no fever, or other complaints. Spitting inconsiderable ; mouth better ; aspect more natural ; is able to walk about, and mends daily. I now allowed him a more generous and substantial diet, and continued the bark twice a-day for another week.

From this time, he continued to get strength apace ; had good nights ; good appetite ; a perfect freedom from head-ach and fever ; and, on the 23d, went to work, being in every respect quite well, and has continued so ever since.

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This patient did not seem to receive the smallest benefit from the blisters, or any thing else, till he took the mercury, which acted like a specific; and the fever seemed to be altogether symptomatic, as it easily yielded after the other complaints were removed.

II.

Observations on the Benefit derived from the Use of the Cuprum Ammoniacum, in a spasmodic Affection of the abdominal Viscera, and in Hysteria.
By Dr John Storer, Physician in Grantham.

THOUGH I cannot subscribe to the opinion of those who seem to believe, that cases of a singular nature, and such only as rarely occur in medical practice, are entitled to the attention of the public; yet, when an affection of this description occurs; when it bids defiance to every mode of treatment which a due attention to the nature of the symptoms is likely to suggest; when, in the end, it yields to a medicine whose powers are but little known; the benefit arising to mankind, from communicating the re-

fult of such experience, is evident. No single case, it is true, can amount to a proof of any thing ; but it is to a collection of such histories, that we are indebted for the introduction of the most valuable articles in the *Materia Medica* ; and it is by these means alone, that we are enabled to ascertain the true nature and extent of their powers, and assign them their proper places in that class of medicines to which they belong.

The following case, in itself but little interesting, is related chiefly with a view to corroborate a late testimony in favour of a medicine whose virtues seem considerable, though hitherto not generally attended to.

Mrs —, a middle aged, married woman, of a delicate habit, having formerly caught cold in child-bed, and being likewise under the influence of constant uneasiness of mind from domestic causes, became subject, for some years past, to a general tremor, extreme terror from trifling causes, and other symptoms indicative of great irritability, and irregular action in the nervous system.

In May last, without any external cause, she was first seized with the paroxysms which shall be

be described, and which continued to gain ground both in violence and frequency, in spite of every method that was thought of for their relief.

I saw her first on the 28th of July, and was present soon after during one of the fits. She complained first of a palpitation of the heart, and a dull pain, attended with a sense of weight and oppression at the præcordia; soon after, she was seized with violent and repeated reachings, during which there was a trifling discharge by vomiting, chiefly consisting of the juices of the stomach; from this, the affection seemed to pass downwards, occasioning an uncommon heaving of the abdominal parts, and at the same time a feel, as if the bowels were twisted together in the most extraordinary manner; this symptom gave way in its turn, and was presently succeeded by a quick, confined, and irregular respiration, accompanied by a hoarse croaking noise in the throat, and a large discharge of froth from the mouth or nose; in a few minutes more, she began to recover. Though she was able to give little or no account of her feelings during the latter part of the paroxysm, yet I am convinced there was no total abolition
of

of the senses at any point of time ; nor were there any convulsions of the external parts, except slight twitchings in the face, and retractions of the eyes. The duration of the paroxysm was from 30 to 40 minutes, and of late they had recurred sometimes twice in 24 hours ; but always at irregular periods.

Such was the violence of the attack, that it left behind it extreme debility, wildness in the eyes, an universal tremor, a constant tearing cough, and an almost total loss of voice ; so that it was with difficulty I could guess at her meaning, when she wished to give me information with regard to her complaints. The pulse, which in the paroxysm was so weak and fluttering as to elude the finger, was irregular during the interval, and varied from 90 to 105 in the minute ; the skin was hotter than natural ; the tongue moist, but extremely foul ; the state of the bowels was uncertain ; costiveness for a few days was, for the most part, succeeded by frequent griping stools, but without producing any change in the disease ; the urine was natural, and the catamenia had flowed regularly since the beginning of the complaint.

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When I saw her first, the continuance of the disease for ten weeks had reduced her so much, that it was with difficulty she moved from one room to another. Her appetite was gone; her complexion fallow, and she had suffered considerable loss of flesh.

In reflecting upon the nature of this complaint, I found myself unable to account for the symptoms, upon any other supposition than that of a convulsive affection of the internal parts, which beginning with the heart itself, attacked successively the stomach, intestines, diaphragm, gullet and trachea.

I could readily discover several circumstances in the habit, which might dispose to such a complaint, but it was necessary to look farther; and I was of opinion, that some irritating cause lurking in the *primæ viæ*, might be what gave immediate occasion to it. To this idea I was led by a constant sense of weight and oppression at the pit of the stomach, which sometimes rose to acute pain, frequent reachings to vomit, and gripings in the bowels.

My first attempts, therefore, in the treatment of this case, were directed towards discharging or correcting this supposed exciting cause; and by
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some means to induce a different mode of action in the parts concerned.

Emetics were accordingly prescribed, and their first effects gave encouragement to repeat them. Their operation both ways, never failed to procure considerable relief from pain and oppression at stomach; but the state of the paroxysms was in no respect altered.

Antispasmodics were next had recourse to; among which opium, castor, camphire, assafœtida, gum ammoniac, valerian, and the volatile alkali were successively employed, in such doses and forms as seemed best to suit the circumstances of the case, and that for three weeks together without the smallest advancement towards a cure; the region of the stomach was blistered; the warm bath was recommended without effect. That tonics might not be left untried, the extract of gentian was combined with the gums to no better purpose. What seemed to afford most relief was a medicine consisting of Tinct. guaic. v. Tinct. theb. and Vin. ipecac. This taken at bed-time, seldom failed to procure a comfortable night, with a soft perspirable skin; but the fits returned with undiminished violence next day. My patient began
now

now to despair of relief; and whatever expectations might have been formed from the bark in diminishing the general irritability of the system, I was convinced the delicate state of the stomach would not admit of its being taken in quantities sufficient to produce that effect. I was therefore reduced to my last shifts, when the *cuprum ammoniacum* occurred to me as a medicine which deserved a trial in such a case: A history, now published by Dr Duncan, where its good effects had been sufficiently proved in a case of genuine epilepsy, had been related to me very circumstantially some years ago; and I had myself seen it of use in a convulsive case more lately.

As my patient could not now swallow a pill, owing to the severe affection of the throat in the fits, I directed one-fourth grain of the cupr. ammon. to be rubbed into a powder, with a few grains of magnesia, and given morning and evening. Though she suffered much from the nausea, occasioned by so small a dose, and what was worse, vomited it up regularly for the first week, she persisted resolutely in its use; the nausea at length ceased, the medicine was retained, and its salutary effects were quickly observable in a diminution of the fits, and an abatement of every troublesome

troublesome symptom ; the dose was soon increased to gr. ss. and afterwards to a whole grain, twice a day.

From this time, there was an evident and daily amendment ; the paroxysms became both less violent and frequent ; the pain and uneasiness at stomach yielded ; the appetite began to return, with every symptom of convalescence. Since she began the use of the cuprum ammoniacum, no other medicine whatever has been prescribed to her ; and she still continues to take the powders at intervals. She has now recovered her usual looks and strength, and has not experienced the smallest return of the fits since the beginning of September last, nor any other complaint, except that general tremor to which she has been subject for years.

As but very few cases are hitherto recorded with a view to ascertain the powers of the medicine in question, I have thought it necessary to state this case with a minute exactness, and a scrupulous attention to facts.

The conclusions to be drawn from it are simple, and will readily occur to those who peruse it. With regard to its mode of operation, I have hitherto considered the cuprum ammoniacum

cum as a powerful tonic. Whether it exerts other, and peculiar effects, on the nervous system, in cases of convulsive affection, must be left to the decision of future experience.

In the light of a tonic alone, I will venture to pronounce it a valuable acquisition to the *Materia Medica*, in a thousand instances, where, from the caprice of the patient, or the extreme delicacy of the stomach, no other medicine of that class can be exhibited in such quantity, as to give it effect.

The case to which I alluded, as having recommended the *cuprum ammoniacum* to my attention in convulsive cases, is that of a young lady, who, for many years past, has been subject to the most violent hysterical fits I ever was witness to.

After complaining for some days of an oppressive head-ach, universal soreness of the muscles, total want of appetite, and a dry husky cough, she was suddenly seized with convulsions as violent, and various in their mode of attack, as hysterical paroxysms usually are. What rendered them peculiarly dreadful, was their continuing from four to five weeks together, during which period she was constantly confined to bed,
and,

and, as I am assured, never had an interval of more than three hours.

For five years these attacks had been in use to return every three or four months at most, and had not been lessened by a variety of methods recommended by some of the most eminent of the faculty.

In May 1778, immediately after recovering from a violent and tedious attack, she began the use of the cuprum ammoniacum, and persisted in it for two months. Since that time, though the irregularity of the menses, (the only evident cause of the fits) continues in the same degree as before, yet the paroxysms have not returned more than twice a year, nor exceeded ten days in their duration. Thus, though the exciting cause is not removed, that disposition in the habit which favoured the disease seems to be much diminished.

To render this case more conclusive, I am still in hopes to prevail on my patient, who has a great aversion to medicines, to give the cuprum ammoniacum a more complete trial. I have not myself met with an opportunity of giving the cuprum ammoniacum in any case of genuine epilepsy. Since writing the above, however, I have

have received a letter from Mr Bland, a surgeon of eminence at Newark, to whom I recommended this medicine. An extract from it will make a proper appendix to this case.

To what I have said, it may not be improper to add, that cuprum ammoniacum prepared with all imaginable care, when exposed for some time in the air, loses its own beautiful deep blue colour, and assumes the appearance of that precipitate, which is deposited upon the first addition of volatile alkali to a solution of blue vitriol. Here there is evidently a decomposition, whether from a dissipation of that portion of the volatile alkali, which was combined with the metal, or from the attraction of acid from the air, is a matter of little importance to the practitioner. This observation, however, has induced me to lay aside the *pilul. cærul.* of the last edition of the Edinburgh Pharmacopœia, and to exhibit the cuprum ammoniacum either in a bolus, or rubbed into a powder with a few grains of magnesia, and wrapt in an oiled paper.

III.

An Account of the effects of the Cuprum Ammoniacum in the Cure of Epilepsy, in a Letter from Mr Thomas Bland, Surgeon at Newark, to Dr Storer of Grantham, communicated to Dr Duncan.

I AM happy in having it in my power to send you the following case, and you are welcome to make what use of it you think proper.

Ann Collinwood, a fine, florid, healthy woman of 22 years of age, being a principal witness against a man for a robbery, was by the magistrates of this place, for want of bail committed to prison, which had such an effect upon her as to occasion the return of epileptic fits, which, as a child of 7 or 8 years old, she had been subject to, but not since, till this period January 4th 1779, when I first saw her. I had her immediately removed from confinement, placed in humane hands, and had proper nurses, provided for her; I presume it will be needless to enumerate every particular symptom, suffice it to say, that the fits were violent and numerous, not less than 20 in the course of a day, and so little

little notice had she of their approach, that (tho' well attended) she was much bruised by falling, &c.

Having already seen the good effects of zinc in an epileptic patient attended with extraordinary circumstances, I therefore ordered that medicine for her, which she regularly continued about three weeks, from the above date, without any material effect, opium, camphire, bark and valerian, with other nervous and antispasmodics were administered, and with no better success. Thus disagreeably circumstanced, I had recourse to the cuprum ammoniacum which you favoured me with, though I must confess, with little hopes of advantage, the violence of the fits, the peculiar situation and state of mind of my patient considered; however, I was agreeably disappointed: The first dose was taken about the 20th of January, and from that time the fits became *daily* less and less till the middle of March following, when she left off her medicine, and was sent to her friends perfectly well.

S E C T. III.

Medical News.

The following Address from Dr Francis Armstrong, Physician at Uppingham, in the County of Rutland, to the Physicians and Gentlemen of the Faculty in Great Britain, respecting the use of Matlock Waters, may, we presume, afford useful Information to many of our Readers.

MATLOCK has long been famed for its mineral springs and baths, but it has, till lately, been frequented by few invalids, tho' a number of able men have written learnedly upon the properties of its waters, and their effects in different disorders. How it so long escaped the attention of the neighbouring physicians, I am at a loss to account for; as they continued sending their patients to Bristol, to
the

the total neglect of their neighbouring springs, which are equal if not preferable to the Bristol water.

Dr Percival of Manchester, that most excellent physician and philosopher, has obliged this nation with a very few judicious remarks and experiments, in the second volume of his Medical and Experimental Essays, upon the nature of Matlock waters and bath. This seems to have opened the eyes of the neighbouring physicians and practitioners, the consequence of which has been, that the number of invalids have encreased every year, and the very extraordinary cures performed by this water, have lately recommended it in such a manner, that at this time, it is frequented by patients from every part of England.

I have taken great pains to examine particularly into the properties of Matlock springs, and may with truth assert, that they are of the same nature with the Bristol water, equal in some cases, and preferable in many. Nor do I think that the air of Matlock is obnoxious in the least to consumptive patients, where the lungs are not injured in such a manner as to render a recovery very doubtful either from the use of me-

dicine or water ; nor have I in my whole practice had the least complaint of this inconvenience from any of my patients.

I ordered a most amiable lady last year to drink the Matlock waters, in a confirmed phthisis pulmonalis, and in such a situation, that I must own, I never expected to see her return. Being greatly interested in her preservation, I gave her full directions how to proceed. With much difficulty she reached the place. The company, in a very uncandid manner, cried out, " What " a cruel physician, to send the lady so far from " home to die!" I saw the lady but three days before she left home, otherwise she should have visited Matlock much sooner. She strictly persevered in the rules laid down, and in a fortnight was enabled to dine in public ; in six weeks was perfectly recovered, having got rid of her cough, and being greatly increased in muscular habit. I visited her on her return, and had I not been perfectly acquainted with her before, I should not have known her. She has continued well ever since, and I hope will for many years, as a blessing to her young family, and a comfort to the best of husbands.

I hope I shall be excused reciting this case, it being one amongst many, in which I have experienced the good effects of this water ; and indeed patients whom I have sent to Bristol, and who have returned benefited in some measure, have afterwards been restored to a perfect and lasting state of health, from the use of Matlock water.

I have, in the course of seven years, sent a great number of patients to Matlock, and in cases where medicine had not the least prospect of being serviceable, all of whom have had perfect and lasting cures : And I may with truth declare, I have not failed in one instance. However contrary to the opinion of some my practice may be, I have after repeated trials found, that in many cases much advantage has been gained by the administration of medicines in conjunction with the course of water drinking ; being well-timed, so as to act in an uniform manner, they had excellent effects, the water being greatly assisted in its operation.

As for the bath (if I may be allowed the expression) it is the coldest hot bath of any I know in Europe ; and, from its temperature, it may with propriety be used either as a cold or hot

bath. I am informed that Mr Archwright is going to build hot and vapour baths at Crawford; if that spirited gentleman executes his plan, Matlock will be one of the most complete places of resort we have in England; as baths of such a nature will render the waters useful in almost every disorder.

I have, when I have been at Matlock, lamented the want of a proper person to regulate the patients, as to the course they ought to pursue. Humanity has induced me to interfere with some who came there for health, and were evidently destroying what they wished to preserve.

At the request of many of my good friends, I have resolved to take upon me the medical direction of Matlock water the ensuing summer. This will be both hazardous and expensive, as I shall make a point of having every thing upon the spot which may in the least assist the waters in their operation. Besides this, my removal for so many months from my situation, at present so desirable, must deprive me of the society of many valuable and agreeable friends; yet I think the good it may produce, will overbalance every other consideration. It has been my opinion
through

through life, that private interest should always give way to public good.

I can promise myself nothing, unless I am supported by the Physicians and Gentlemen of the Faculty; it is through them alone I can be furnished with a sufficient number of cases, and from such cases can I do that justice to the waters which they merit. Should I be so lucky as to meet with this support, I pledge myself to publish regularly every case worthy publication: But not till such time as I have had sufficient experience to authenticate what shall be published.

I perfectly agree with Dr Percival, that a larger quantity of Matlock water may be drunk at a time, than of any other mineral water I am acquainted with, owing to the entire absence of any mineral spirit; yet it is always advisable to begin with small quantities. From the want of mineral spirit, it is less apt to throw the circulation of the blood into irregularities, or quicken the pulse; and, therefore, it must have the preference to Bristol water, in the phthisis pulmonalis, hæmoptoe, diabetes, fluor albus, &c. In all these I have experienced the most happy effects from it, as well as in hectic and low fevers,

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in hysteric and hypochondriac affections, in a profluvium or deficiency of the catamenia, in bilious disorders, in constitutions debilitated by long and severe vernal and autumnal intermittents, in disorders arising from long residence in hot climates, in broken constitutions brought on by hard and habitual drinking, and in weak or depraved appetites. I intend to reside constantly at the Hall in Matlock, from the beginning of June till the latter end of September, or longer; but this must depend upon the company that is there.

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In the month of March 1778, Dr Clarke of Jamaica, in a botanical excursion, after two days and a half of a laborious ascent, reached the summit of the Blue Mountain Peak, where no human foot had ever trode, and which had before been considered as inaccessible. De Luc's portable barometer from 30. 2. where it is almost stationary at the level of the sea, the mercury in the thermometer, pointing at the time of observation (10. A. M.) to 85, fell at noon at the summit to 23. 3. while the thermometer stood at 60. In August following, Dr Clarke slept two nights in a hut on the same spot, when the
range

range of the thermometer was from a little above 47. at day-break, to somewhat more than 58. at noon. Though this mountain has much of the volcano appearance, no traces of lava, or a crater, were discovered. It was found to be shaded with woods to the very top, and the ground and trees covered to a great thickness with the mosses common in Europe. He has lately discovered immense collections of corallines, and of loose and petrified sea-shells, at places from 1000 to 3000 feet above the level of the sea. This seems to contradict the commonly received opinion, that the chain of West India islands was once connected to the continent. A friend of Dr Clarke's, Mr Alexander Roberts, has lately found a species of the *Cinchona* with racemose flowers, very similar to these of the *Cinchona Caribæa* of Jaquin and Linnæus, and to the *Cinchona Jamaicensis* of Dr Wright. It is however a better astringent bark, and is difficultly distinguished from the Peruvian. A trial has been made with the powder of this bark, in doses of half a dram, on a negro labouring under a severe and regular tertian, which it perfectly cured.

* * * *

A building has lately been begun at Edinburgh, for the use of the Public Dispensary at that place. Below the foundation-stone was deposited a medal, on which was engraved a figure of the Goddess of Health, with the words *Salus Publica* for a legend; and, on the reverse was the following inscription; *Valetudinarium Edin-burgenum conditum, anno post Christ. nat. 1780.* The expence of this building is defrayed by voluntary contributions, and from the advantages of which the charity has been already productive, there is every reason to hope that it will meet with the encouragement it deserves. The Dispensary of Edinburgh has not only afforded relief to thousands subjected at once to poverty and disease, but has also furnished to the students at that place, an opportunity of learning by experiment and example the most proper practice in those diseases, which cannot, with propriety, be admitted into an hospital. It is therefore hoped, that the present undertaking, which is calculated to give permanence to this institution, and to furnish it with advantages which it has not hitherto enjoyed; may be promoted not only by the inhabitants of Edinburgh, but
also

also by others who wish to encourage medical education, or the improvement of the healing art.

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On Thursday the 26th of October, Dr Duncan will begin at Edinburgh his Course of Lectures on the Theory and Practice of Medicine; and on Saturday the 28th of October, he will begin his Winter Course of Case-Lectures. Each Course continues for about six months: The fee for a first Course is Two Guineas; for a second, One Guinea; after which, the Pupils become perpetual, without any further fee, excepting half a guinea in name of medicine-money, for the benefit of the Dispensary, when they attend the Case-Lectures.

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A new edition of the Works of the late Alexander Monro, Professor of Anatomy in the University of Edinburgh, is at present in the press. This publication is superintended by his son, the present Professor of Anatomy at Edinburgh. It will consist of one volume in 4to. In this will be collected his whole works which have been already printed, with additions and corrections from his own manuscripts, and notes by his son. But besides these, it will contain also some papers which he left in manuscript, and
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which have never hitherto been published. His Comparative Anatomy, which, during his lifetime, was only surreptitiously published by one of his pupils, will now appear in a more accurate and extensive form.

* * * *

A new work in Midwifery, by Mr Alexander Hamilton surgeon in Edinburgh, is also in the press. This work is principally intended for the use of female practitioners, and is calculated to afford plain and simple directions for the management of a variety of female complaints, as well as cases in midwifery. In this view, it must be a valuable acquisition. For there are few books designed for the use of women in any language; and the only publications in the English language that can fall into their hands, which do not abound with such technical terms as must render them unintelligible, contain none of the late valuable improvements in the art. If this publication shall have the effect of removing any of these numerous prejudices, by which many of the female practitioners are influenced, and of awakening their fears, when it is necessary that recourse should be had to superior skill, it may be productive of the most valuable services to the community.

S E C T.

S E C T. IV.

List of New Books.

MEDICINÆ Præcos Systema ex Academicæ
Edinburgenæ disputationibus inaugura-
libus, præcipue depromptum & secundum na-
turæ ordinem digestum. Curante Carole Web-
ster, valetudinarii publici Edin. med. alter. e Coll.
Reg. Med. & Societ. Reg. Med. Edin. hujusque
ad acta edenda a secretis. In duobus tomis. 8vo.
Edinburgi.

Some Observations relative to the Influence
of Climate on vegetable and animal Bodies. By
Alexander Wilson, M. D. 8vo. London.

Philosophical

Philosophical Transactions of the Royal Society of London. Vol. LXIX. Part I. for the year 1779. 8vo. London.

An Account of the Life and Writings of the late Alexander Monro, *sen.* M. D. F. R. S. delivered as the Harveian oration at Edinburgh, for the year 1780, by Andrew Duncan, M. D. Member of the Royal Societies of Medicine of Paris, Copenhagen, and Edinburgh. 8vo. Edinburgh.

An Account of the Methods pursued in the Treatment of Cancerous and Schirrous Disorders, and other Indurations. By J. O. Justamond, F. R. S. 8vo. London.

Practical Observations on Amputation, and after treatment. By Edward Alanson.

An Answer to a Letter, addressed by Francis Riollay physician of Newbury, to James Hardy physician of Barnstaple. 8vo. London.

Joannis Brunonis Elementa Medicinæ. 8vo. Edinburgi.

Experiments and Observations made with the view of improving the Art of composing and applying Calcareous Cements, and of preparing Quicklime, &c. By Bry. Higgins, M. D. 8vo. London.

Some

Some Observations on the Origin, Progress, and Method of Treating the atrabilious Temperament and Gout. 8vo. London.

The Gout and Rheumatism cured or alleviated. By William Rowley, M. D. 8vo. London.

Specimen inaugurale de Spiritu ardente ex Lacte bibulo. Auctore Nicolao Oferetskowsky. 8vo. Argentorati.

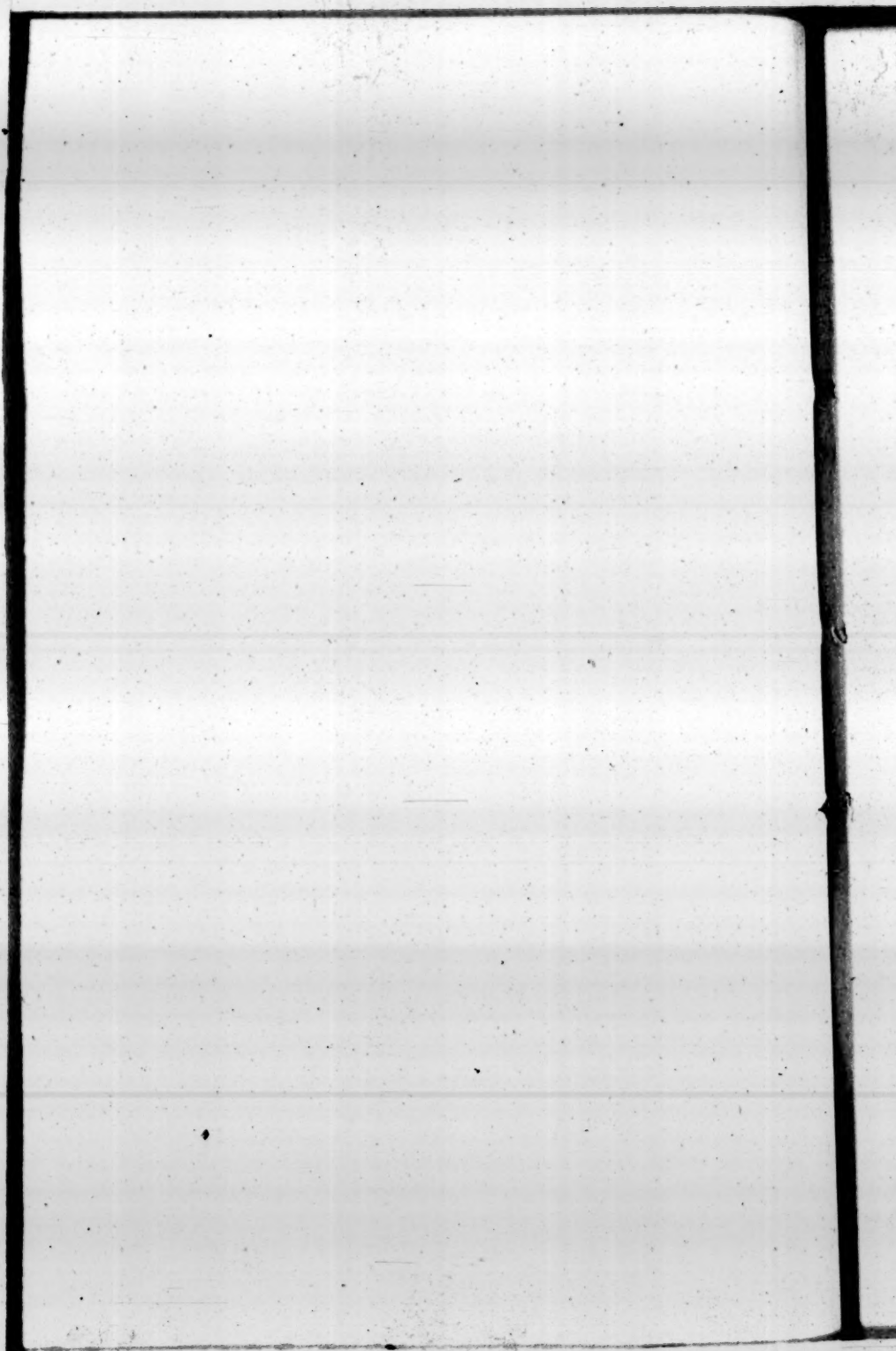
Examen de plusieurs Prejuges et Usages abusifs, concernant les Femmes enceintes, celles qui sont accouchées, & les Enfans en bas Age. Par M. Saucerrote. 8vo. Strasbourg.

Abrégé de l'Histoire naturelle, à l'Usage des Eleves de l'Ecole Royale Militaire. 8vo. Paris.

Histoire de l'Esquinancie gangreneuse petechiale, qui a régné dans le village de Moivron. Par M. Read, Docteur en Medecine. 8vo. Metz.

Cours elementaire d'Education des Sourds et Muets. Par M. l'Abbé Deschamps, Chaplain de l'Eglise d'Orleans. 8vo. Paris.

Memoires historiques sur la Maladie singulier de la Veuve Melin, dite la Femme aux Ongles, lû à la Faculté de Medecine de Paris. 12mo. Paris.



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